



Practical Development of Information System in Business Context:  
Freight Forwarding System for Jade Logistics Co., Ltd.

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Submitted in Partial Fulfillment  
of the Course BIS 4995 Information Systems Development  
Bachelor's Degree of Business Administration  
in Business Information Systems Program  
Assumption University

March, 2003

Project Name: Practical Internship Freight Forwarding System for Jade Logistics Co.,LTD.




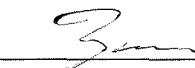
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Advisor: A. Somchai Chaowapattanawong

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The Department of Business Information Systems, ABAC School of Management has approved the aforementioned project, which includes complete Project Write-up and System submitted as the fulfillment of the 3-credit course BIS 4995 Information System Development towards the requirements for the Bachelor's Degree of Business Administration in Business Information Systems

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March 2003



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Advisor: A. Somchai Chaowapattanawong

**PROJECT WRITE-UP**

Prepared by

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I. INTRODUCTION

1.1 Background of the Organization

Jade Logistics Co., Ltd. will be held in the near future. The company is in the field of international transport and freight forwarding service. The company provides worldwide logistics service by sea freight forwarding.

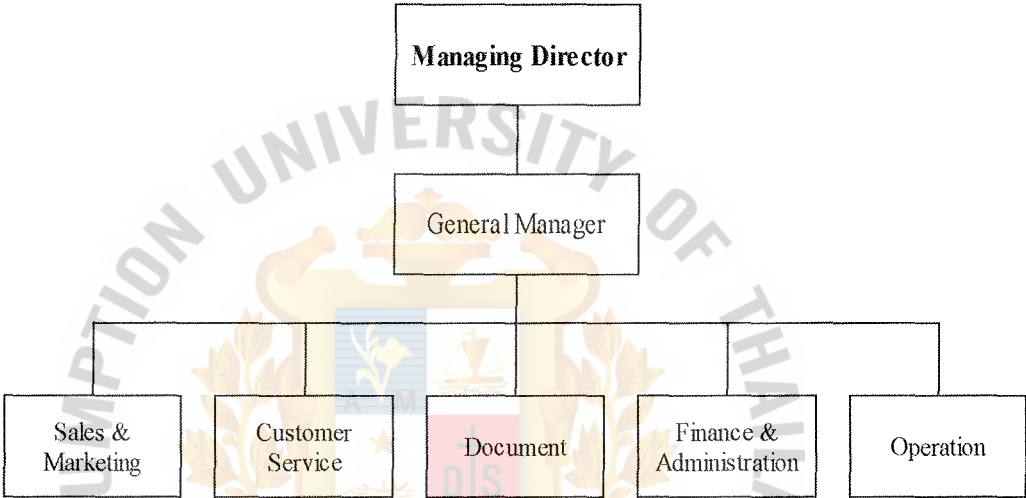


Figure 1-1 Organization Chart

## 1.2 Objectives of the System

- (1) To provides company website with easy access.

The company wants to provide website to customers. So the customers can log on to website anytime and anywhere. The website should have responsive content and should be easy to find and easy to use.

- (2) To help customers to tailor time of communication and cost reduction.

The company wants to create Internet usage as business tool. The customers can communicate with us and gather information from us. Jade Logistics has designed to give the customers quick, simple, and convenient functions to help in saving time and money.

- (3) To provide e-services to customers

The company wants to provide e-services to customers. E-services consist of ocean carrier schedules, sea freight, booking online, track and trace, arrival notice, and documentation, all of which are prepared to facilitate our customers in order processing and enable them to stay in touch with their shipment. And e-services should be easy for customers to use.

- (4) To receive the customer order 24 hours a day

The company wants to receive the customer order 24 hours a day, it takes benefits both customer and the Jade Logistics.

- (5) To be convenient in managing the customer and carrier information

The company wants to be easier to manage and update the customer and carrier information, and contact the customer and carrier easily by using the existing record.



### 1.3 Scope of the System

- (1). To create and maintain database of users.
- (2). To keep schedules of carriers so the customers can check schedule for their destination.
- (3). To keep sea freight so customers can make a rate inquiry.
- (4). To make a form for the customers to make their booking online.
- (5). To keep current location and the last movement of shipment so the customers can track and trace their shipment.
- (6). To make event notification to the customers.
- (7). To make shipment summary for the customers so customers can see summaries of all their shipments.
- (8). To update and make the web site accessible online 24 hours a day,

No.	Task Name	November				December				January				February			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
I.	Analysis of the Existing System																
1.	Study the Existing System																
2.	Identify the Existing Problems																
3.	Existing Data Flow Diagram																
II.	Preliminary Investigation																
4.	Define the objectives and scope																
5.	Hardware Requirements																
6.	Software Requirements																
III.	Analysis and Design of the Proposed System																
7.	Data Flow Diagram																
8.	Entity-Relationship Diagram																
9.	Database Design																
10.	Process specification																
11.	Data Dictionary																
12.	Interface Design																
13.	Report Design																
IV.	Implementation of the Proposed System																
14.	Coding																
15.	Testing																
16.	Documentation																

Figure 1-2 Project Plan for Freight Forwarding System

II. PROTOTYPE

2.1 Prototype

The customer makes a booking particular and submits to freight forwarding company. Freight forwarding contacts carrier to make booking space. Carrier sends original bill of lading to freight forwarding. Freight forwarding sends house bill of lading to freight forwarding. Freight forwarding sends house bill of lading to destination and customer together with summary report. Freight forwarding will make the payment to the agent destination as a commission.

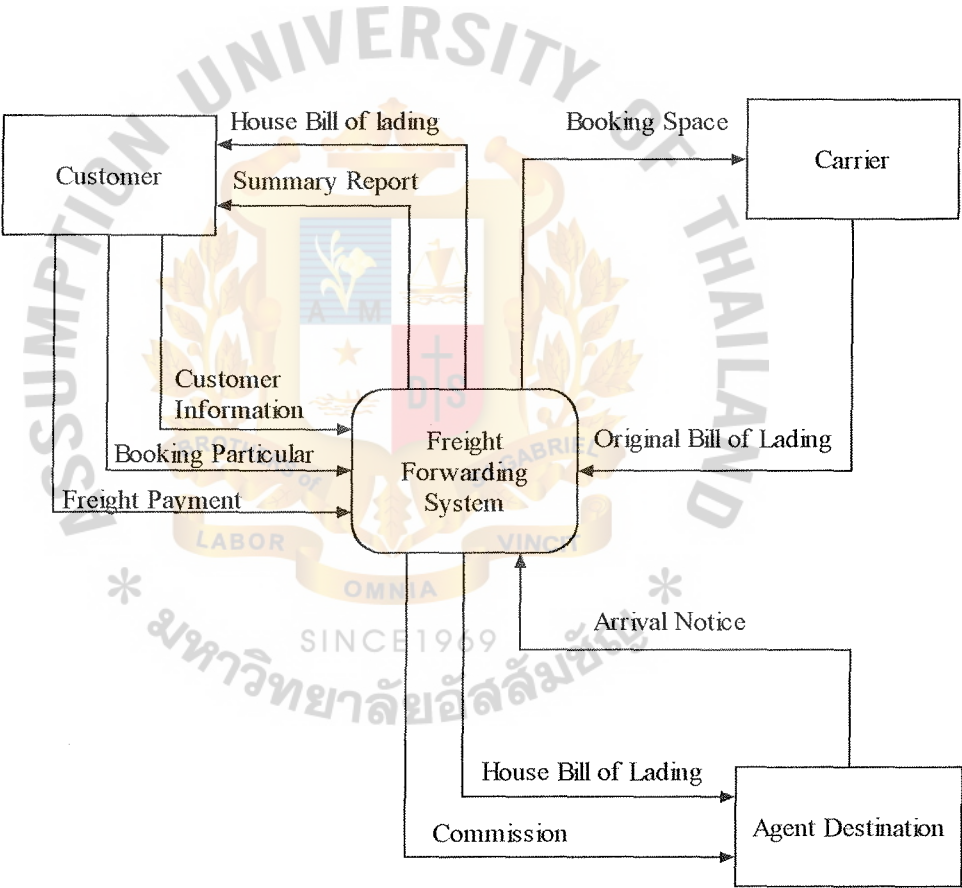


Figure 2-1 Context Diagram of Business Prototype

## 2.2 Problem Definition

- (1) Difficulty of document delivered by messenger in domestic country.

This makes cost of transportation, messenger hiring and time consuming to deliver the document between customer, company, and carrier

- (2) Difficulty of document delivered by messenger in international.

The existing system using DHL to deliver the document between the company and agent destination.

- (3) Lack of Accuracy.

The document and information of each particular are typed by each party, the mistake is occurred many times. This makes the delay of documentation for correctness.

- (4) Different time zone.

If the agent destination needs to contact the company, it may be difficult in time different so they have to wait until the company begins their office hour. So, it makes the delay of documentation.

- (5) Inefficiency in keeping information.

When the company wants to keep the carrier and customer information, it has to be kept as the hard copy.

- (6) Time Limitation.

The customer cannot make the booking particular and order spacing which is not in office hour.



III. THE PROPOSED SYSTEM

3.1 System Specification

(1) Hardware Requirements

Table 3-1 Hardware Requirements

HAREWARE	SPECIFICATION
CPU	Intel Pentium 2 350Hz.
RAM	256 MB DDR-RAM
Hard disk	10 GB
Additional Device	Server, UPS, Printer

The minimum requirement of hardware in Jade Logistics should be Intel Pentium 2 350Hz. of CPU, Ram should be at least 64 MB DDR-RAM. For hard disk, Jade has to keep many databases and other information, so, Jade should have hard disk at least 10 GB. For additional device, Jade also requires Server, UPS and Printer for operations.

## (2) Software Requirements

Table 3-2 Software Requirements

SFTWARE	SPECIFICATION
Operating System	Microsoft Windows 2000
Application	<ol style="list-style-type: none"><li>1. Microsoft Office 2000</li><li>2. PHPtriad 4.0</li><li>3. MySQL 3.23</li><li>4. APACHE</li><li>5. Internet Explorer 6.0</li><li>6. Macromedia Dream weaver mx6</li><li>7. Adobe Photoshop 7.0</li><li>8. Adobe Acrobat Reader</li><li>9. Adobe Acrobat Writer</li></ol>

The Software Requirements are so important for Jade to operate the business, for the operating system, Jade will use Microsoft Windows 2000. For application, Jade will use Microsoft Office 2000 in order to use with Microsoft Windows 2000 properly, PHPtriad 4.0, MySQL 3.23 and APACHE are used for operating the E-Customer Service. Internet Explorer 6.0 is for connecting to the web site, Macromedia Dream weaver mx6 is used for creating and editing the web page. Adobe Photoshop 7.0 is used for decorating the image. Adobe Acrobat Reader is used for viewing the document in PDF File. Adobe Acrobat Writer is used for creating and editing the document that used PDF file

3.2 System Design

(1) Data Flow Diagram

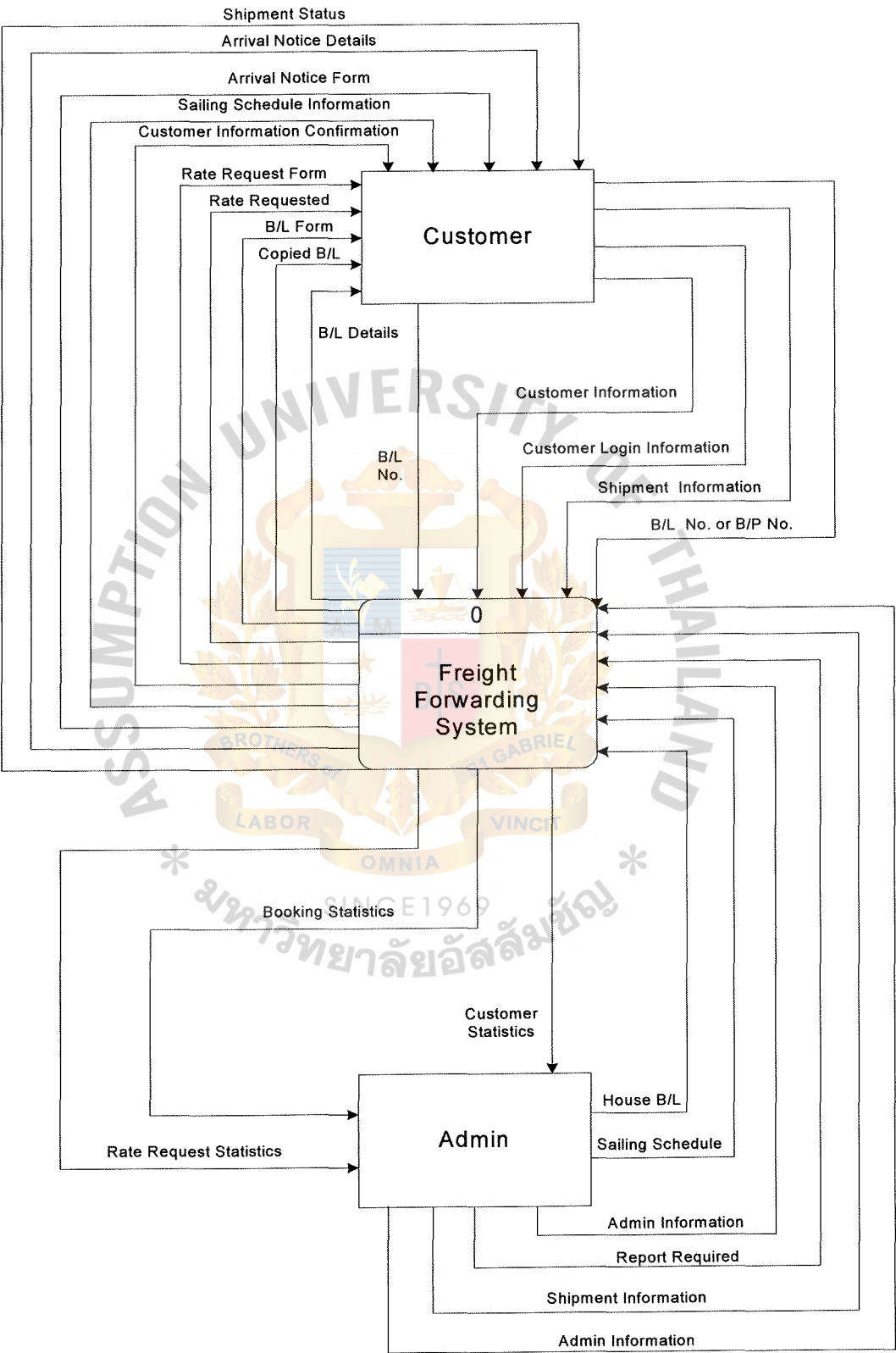


Figure 3-1 Context Diagram

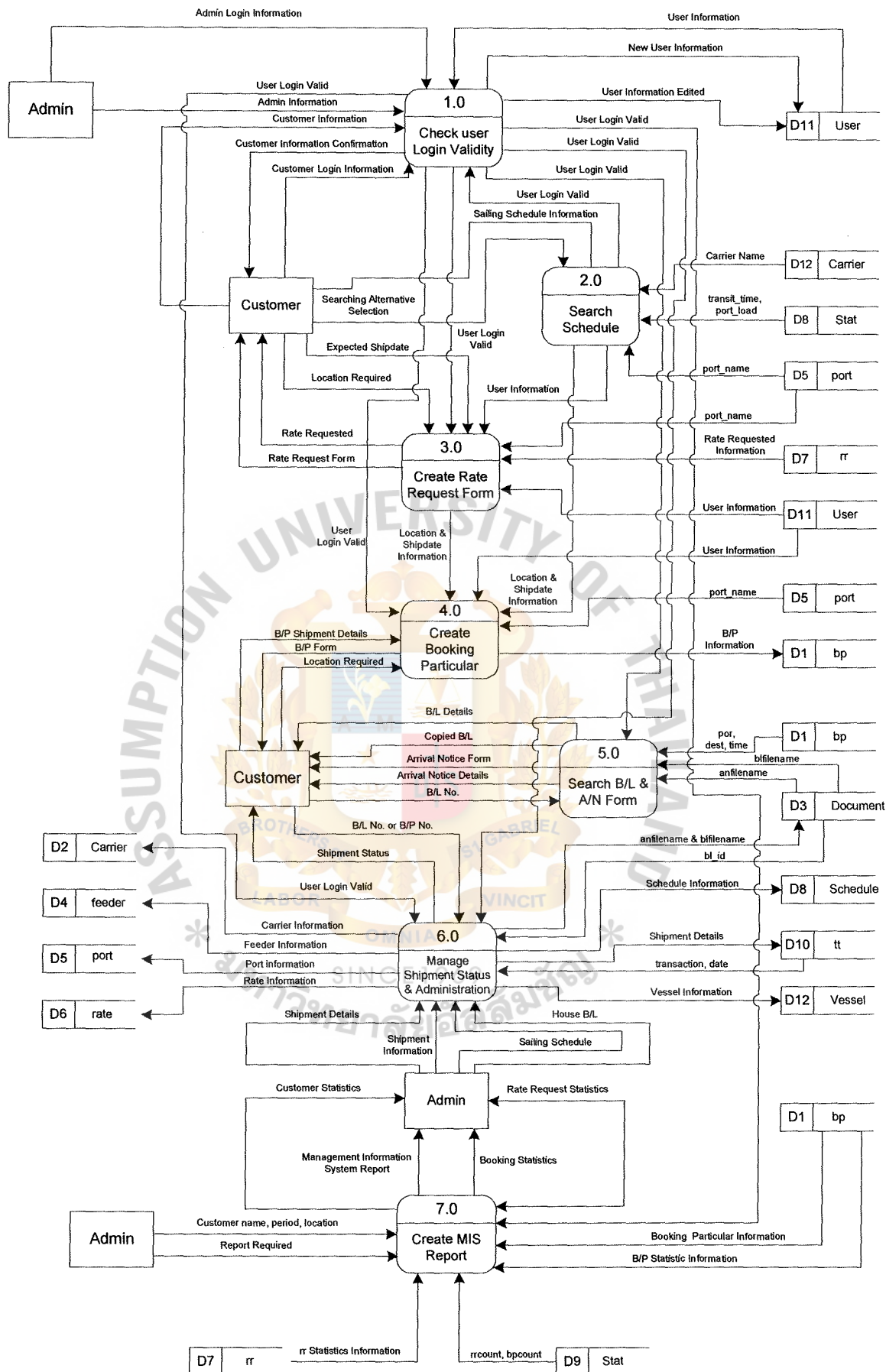


Figure 3-2 Data Flow Diagram – Level 0



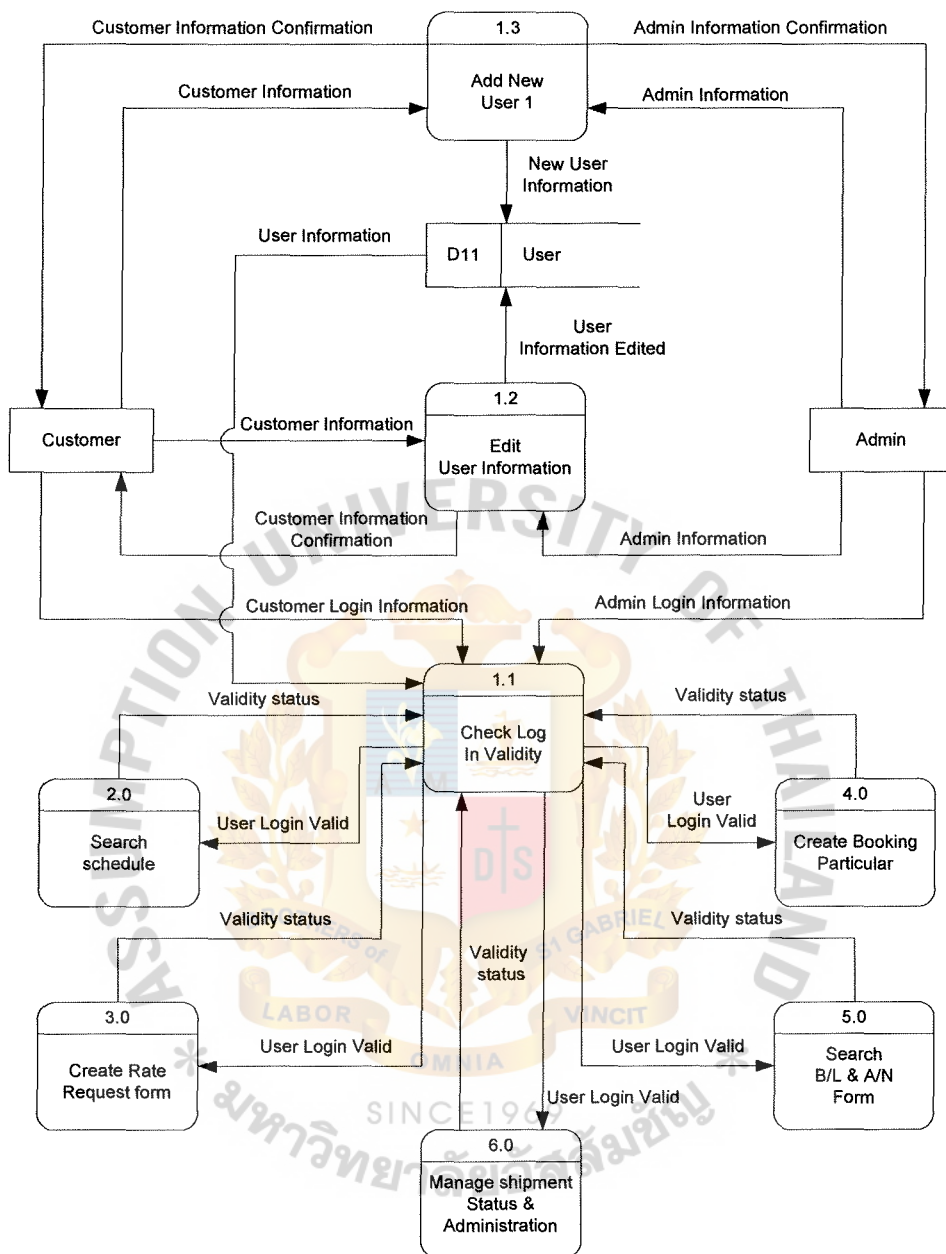


Figure 3-3 Data Flow Diagram – Level 1 for Process 1

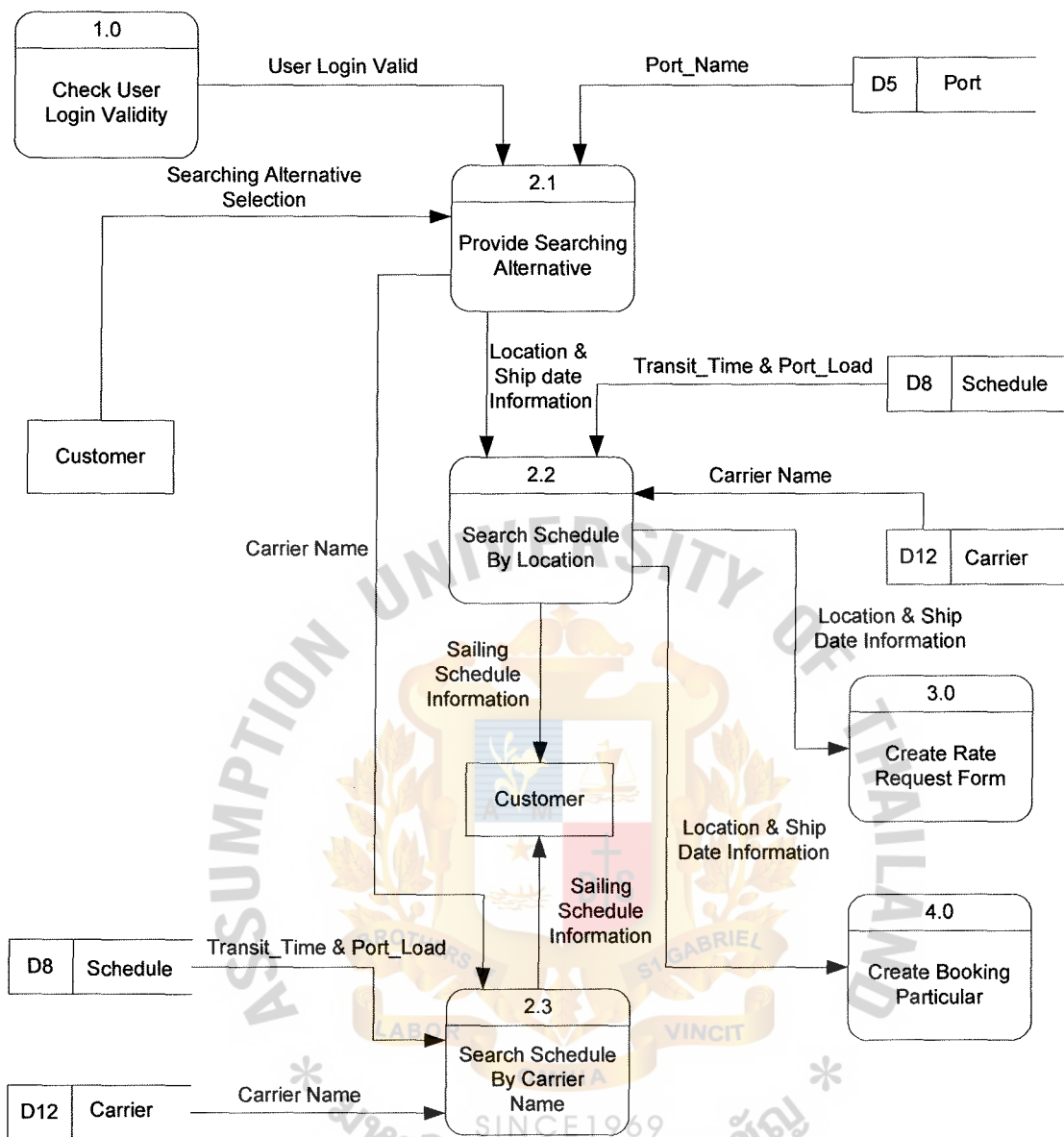


Figure 3-4 Data Flow Diagram – Level 1 for Process 2

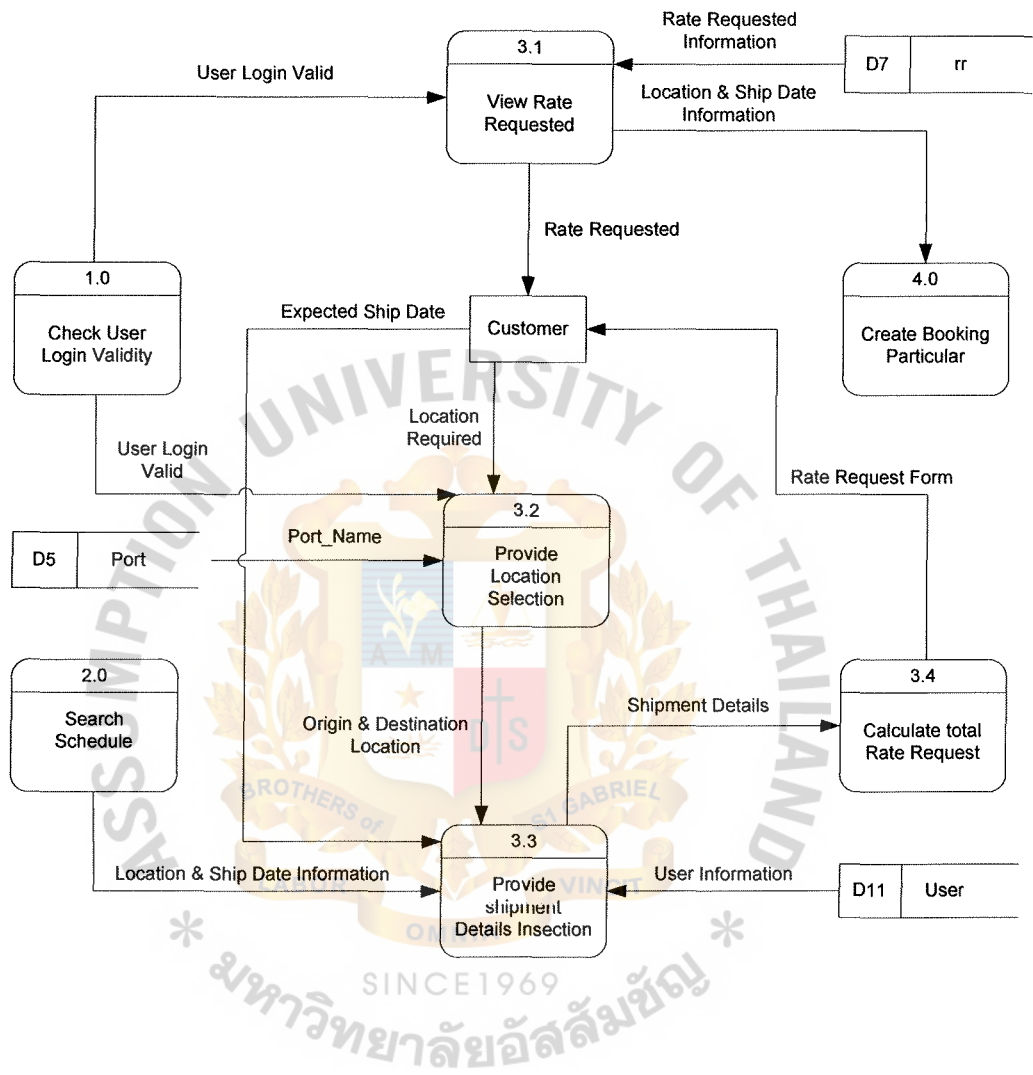


Figure 3-5 Data Flow Diagram – Level 1 for Process 3

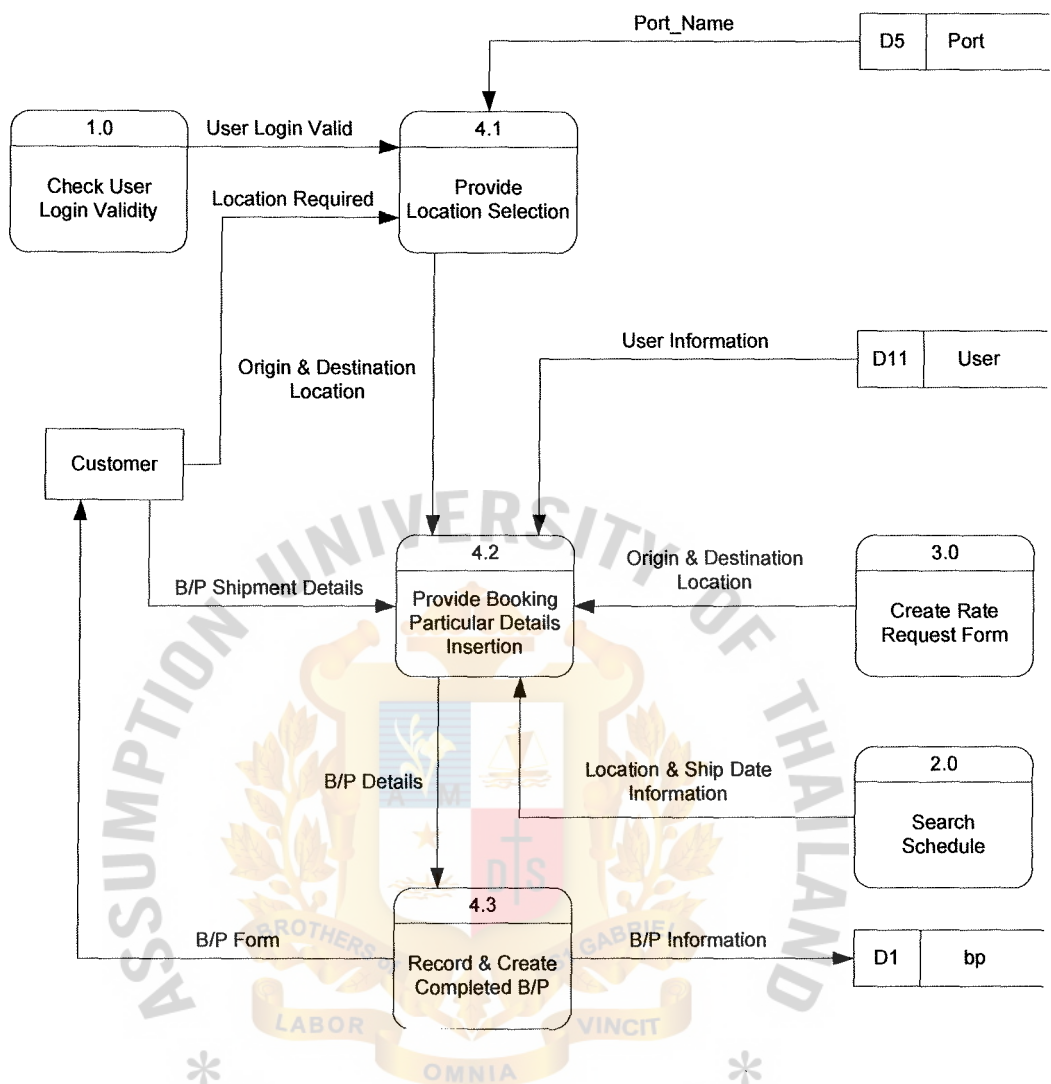


Figure 3-6 Data Flow Diagram – Level 1 for Process 4



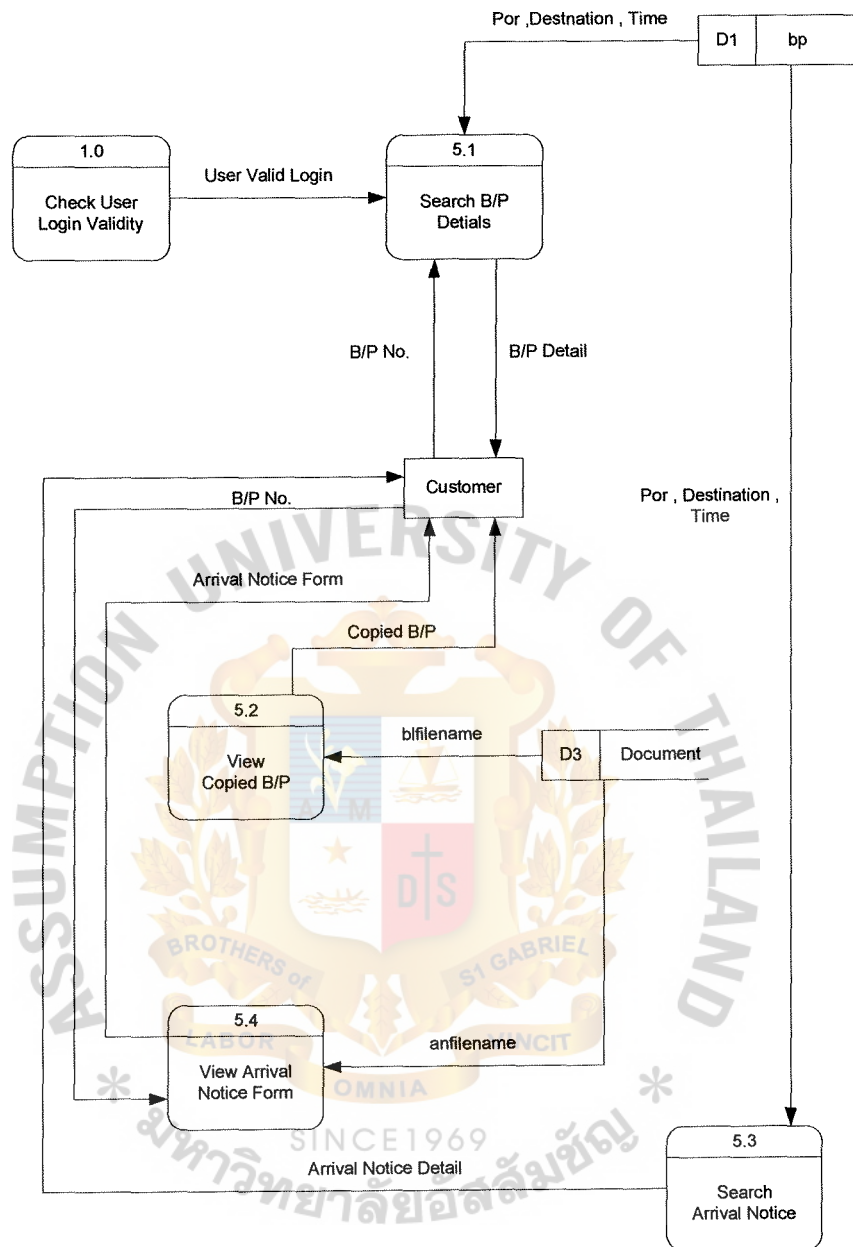


Figure 3-7 Data Flow Diagram – Level 1 for Process 5



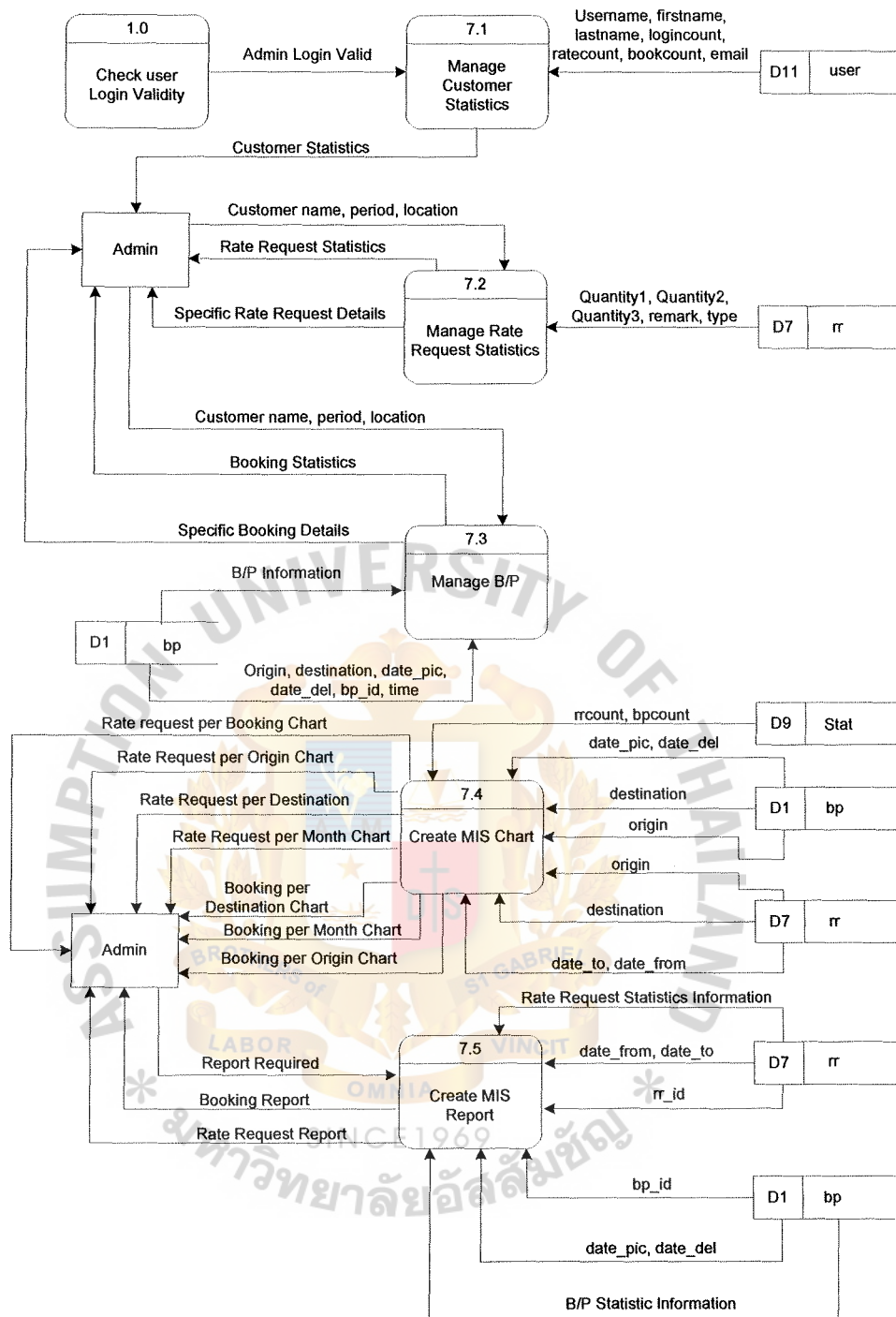


Figure 3-9 Data Flow Diagram – Level 1 for Process 7

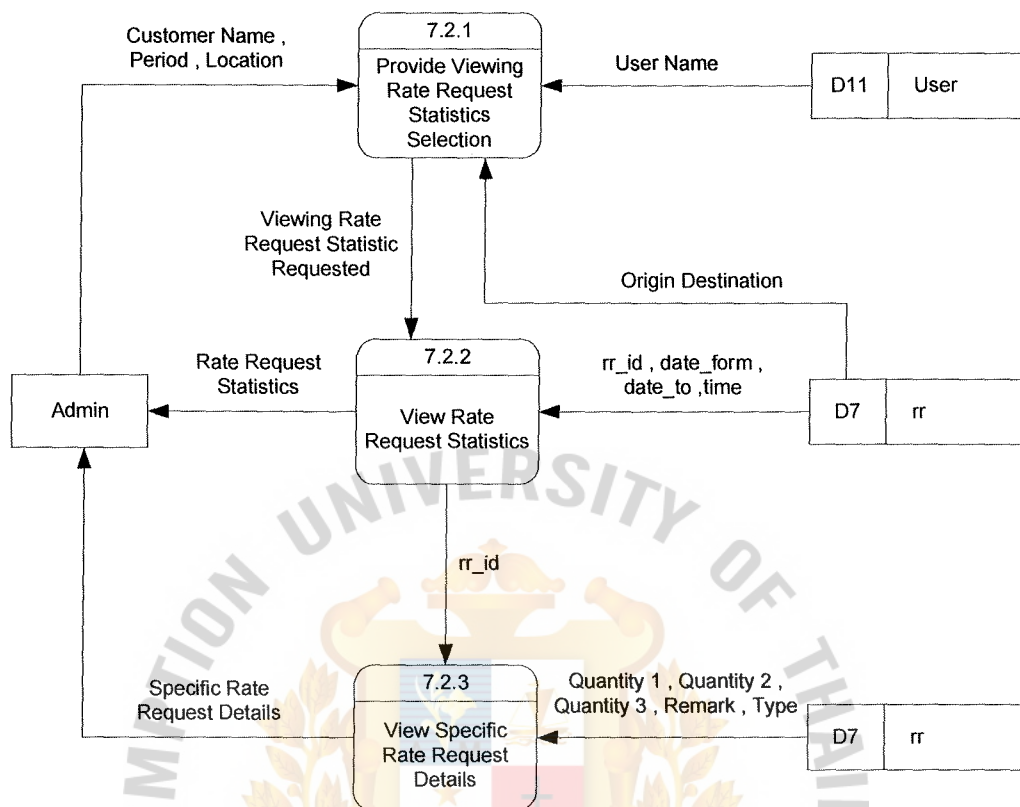


Figure 3-10 Data Flow Diagram – Level 2 for Process 7.2

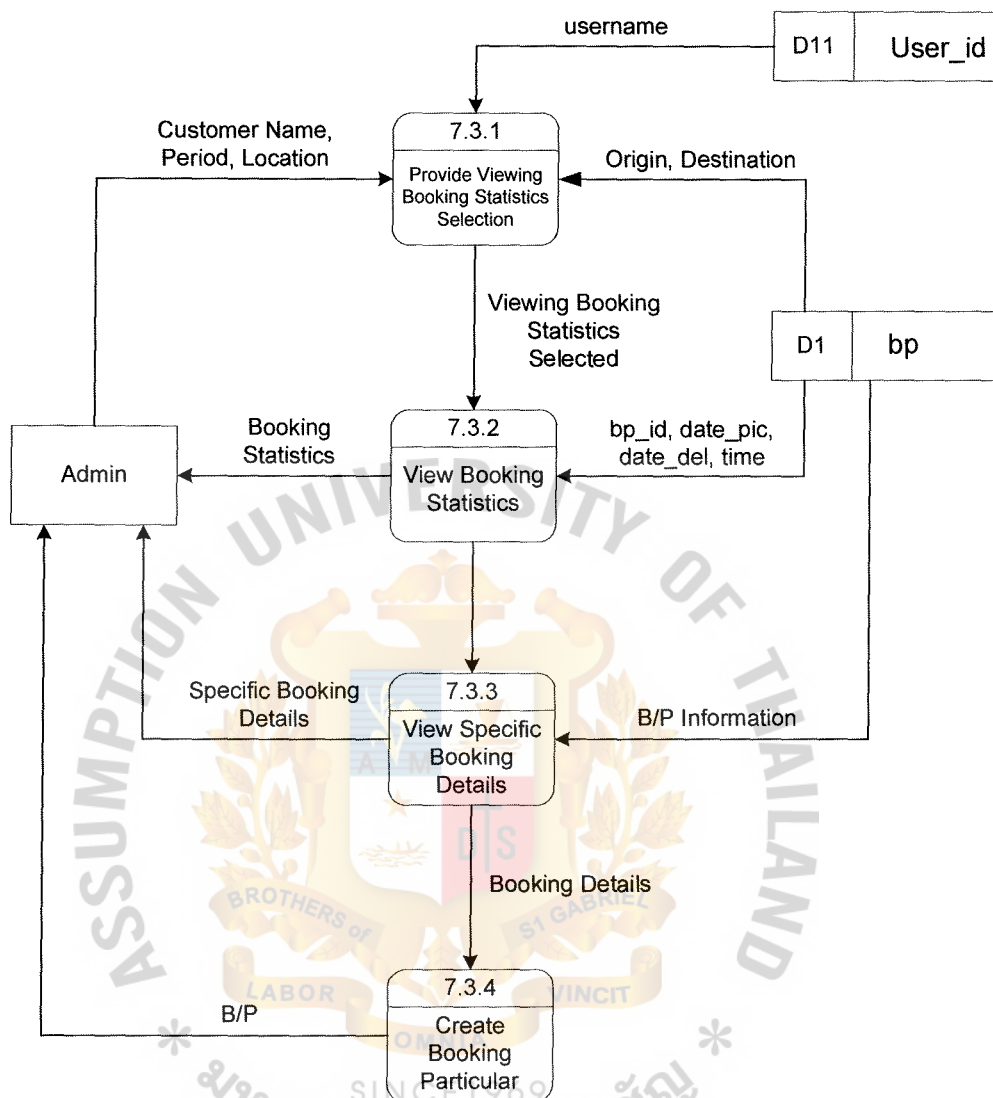


Figure 3-11 Data Flow Diagram – Level 2 for Process 7.3

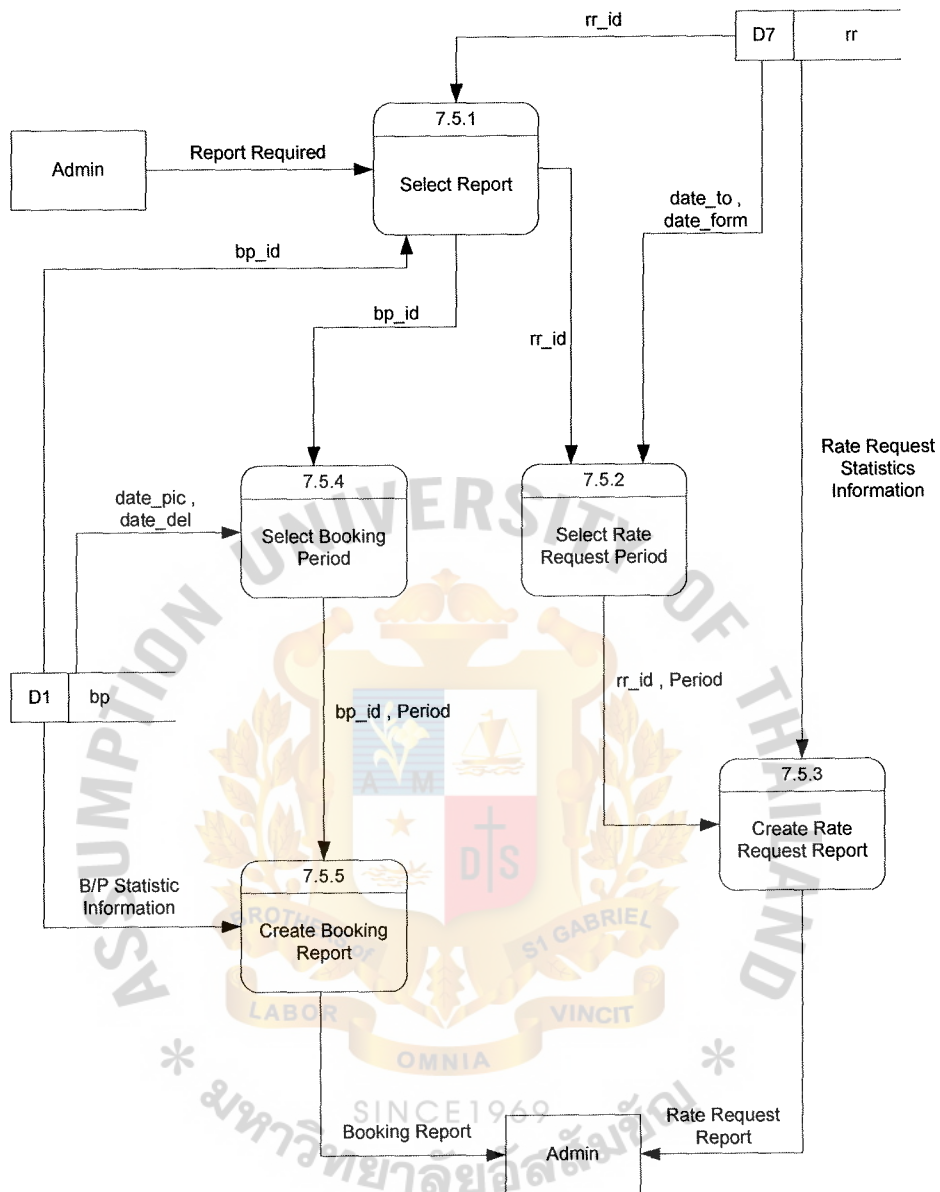


Figure 3-12 Data Flow Diagram – Level 2 for Process 7.5



(2) Entity-Relationship Diagram

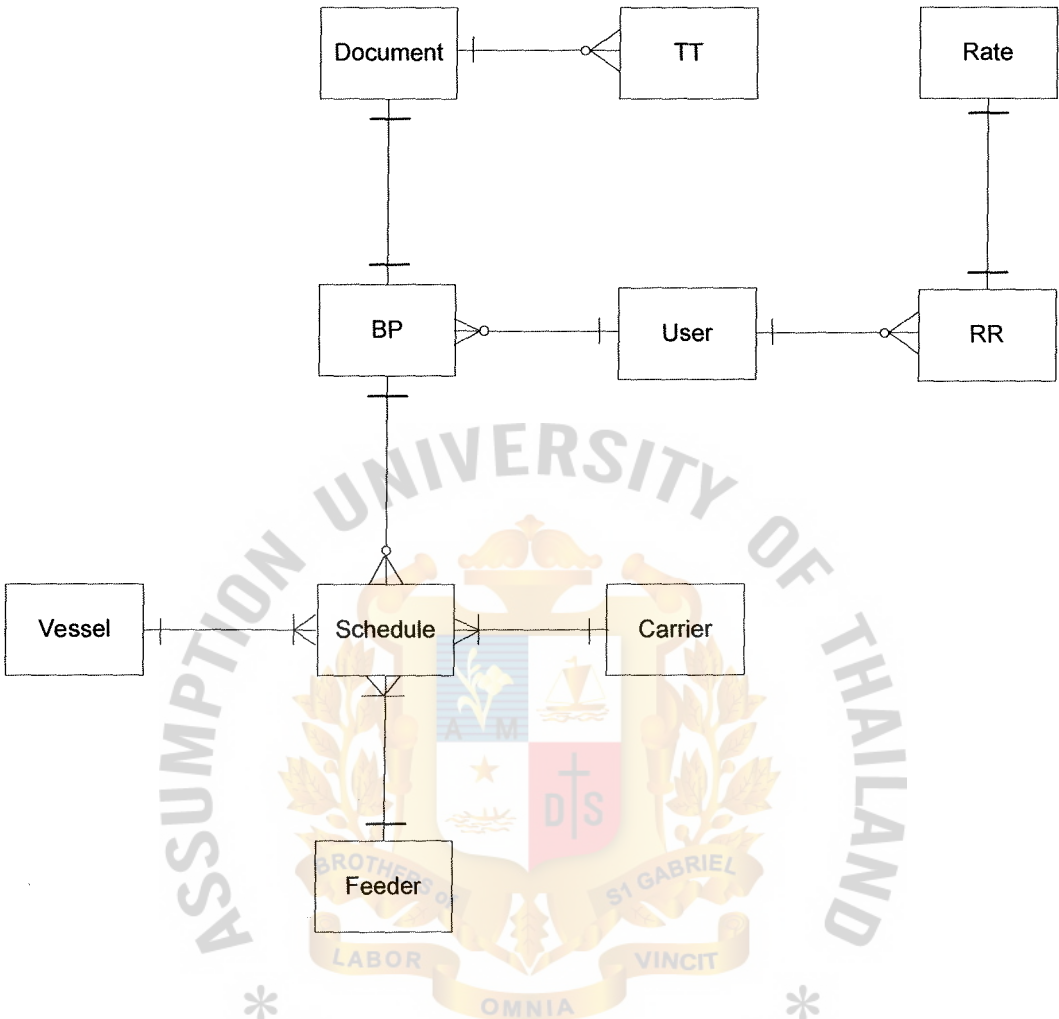


Figure 3-13 Entity-Relationship Diagram

### (3) Database Design

The database is designed to be easier to track the database for freight forwarding for Jade's business. Jade managed the database using FIFO method to serve the customer. For example, the first Booking Particular made by customers will be responded first and then the following customer. The database design is described as follow:

- bp Table (see Appendix A Table A-1)

bp table collects a booking data from user. When user make any booking, a data from booking form Booking Particular also retrieve these data to generate Booking Particular to send to carrier.

- carrier Table (see Appendix A Table A-2)

carrier table collects carrier's data and is retrieved to show by searching schedule service.

- document Table (see Appendix A Table A-3)

document table tells the relationship between Booking Particular number and Bill of Lading number. It also collect a link to Bill of Lading and Arrival Notice file.

- feeder Table (see Appendix A Table A-4)

feeder table describes details of feeder. And to be retrieved by searching schedule.

- port Table (see Appendix A Table A-5)

port table collects details of all ports which are cover by our service. This data is retrieved by searching schedule, rate request, and booking service.

- rate Table (see Appendix A Table A-6)

rate table provides a rate for each schedule route, it depend on many factors such as origin, destination, carrier, type of container, and size will be stored into this table, and etc.

- rr Table (see Appendix A Table A-7)

rr table collects data when users make any rate requests. This data is retrieved by users or administrator to show history of rate request.

- schedule Table (see Appendix A Table A-8)

schedule table shows the schedule of shipment of carrier who involve with Jade Logistics.

- stat Table (see Appendix A Table A-9)

stat table is used for storing counter for any rate requests or booking made.

- tt Table (see Appendix A Table A-10)

tt table collects status of shipment. Tracking will retrieve status from this table.

- user Table (see Appendix A Table A-11)

user table is a main table for keeping user information. Users can edit their own data.

- vessel Table (see Appendix A Table A-12)

vessel table collects details of vessel from any carriers. And to be retrieved by searching schedule service.

(4) Process Specification

Table 3-3 Process Specification for Process 1.0

Process Name:	Check User Login Validity
Data In:	<ul style="list-style-type: none"> <li>(1) Customer login Information</li> <li>(2) Customer Information</li> <li>(3) Admin Login Information</li> <li>(4) Admin Information</li> <li>(5) User Information</li> </ul>
Data Out:	<ul style="list-style-type: none"> <li>(1) Customer Information Confirmation</li> <li>(2) New User Information</li> <li>(3) User Information Edited</li> <li>(4) User Login Valid</li> </ul>
Process:	<ul style="list-style-type: none"> <li>(1) Get the Customer Information from the customer</li> <li>(2) Check the customer validity, if the customer is not valid, the customer has to sign up first, if the customer is valid, and the customer can use the company service.</li> <li>(3) Add new and update record of customer information to the user file</li> <li>(4) Inform other process to allow the customer to use the service</li> </ul>

Attachment:	(1) Customer
	(2) Admin
	(3) Data Store D11
	(4) Process 2.0
	(5) Process 3.0
	(6) Process 4.0
	(7) Process 5.0
	(8) Process 6.0



Table 3-4 Process Specification for Process 1.1

Process Name:	Check Login validity
Data In:	(1) Customer Login Information (2) Admin Login Information (3) User Information (4) Validity Status
Data Out:	(1) User log in Valid
Process:	(1) Get User log in Information and validity Status to check whether the customer is valid or not. (2) Get the user information from Customer and Admin for the customer who didn't sign up yet. (3) Pass the user log in validity to the next process
Attachment:	(1) Customer (2) Admin (3) Data Store D11 (4) Process 2.0 (5) Process 3.0 (6) Process 4.0 (7) Process 5.0 (8) Process 6.0



Table 3-5 Process Specification for Process 1.2

Process Name:	Edit User Information
Data In:	(1) Customer Information (2) Admin Information
Data Out:	(1) Customer Information Confirmation (2) Customer Information Edited
Process:	(1) Get Customer and Admin Information from both users to edit the profiles. (2) Confirm the customer Information to the customer (3) Record the customer information edited to the user file.
Attachment:	(1) Customer (2) Data Store D11

Table 3-6 Process Specification for Process 1.3

Process Name:	Add New User
Data In:	(1) Customer Information (2) Admin Information
Data Out:	(1) Customer Information Confirmation (2) Admin Information Confirmation (3) New User Information
Process:	(1) Get Customer and Admin Information to add new customer to the record. (2) Record the New User Information to the User File. (3) Confirm the Customer and Admin information by E-Mail
Attachment:	(1) Customer (2) Admin (3) Data Store D11

Table 3-7 Process Specification for Process 2.0

Process Name:	Search Schedule
Data In:	<ul style="list-style-type: none"> <li>(1) Searching Alternative Selection</li> <li>(2) User Login Valid</li> <li>(3) carrier name</li> <li>(4) transit_time, port_load</li> <li>(5) port_name</li> </ul>
Data Out:	<ul style="list-style-type: none"> <li>(1) Sailing Schedule Information</li> <li>(2) Location &amp; ship date Information</li> </ul>
Process:	<ul style="list-style-type: none"> <li>(1) Get User Login Valid to allow the customer to use the company's service</li> <li>(2) Get the alternative selection in searching from the customer</li> <li>(3) Get carrier name from carrier file as foreign key to track sailing schedule from Schedule file and port_name from port file</li> <li>(4) Search Schedule for the customer and transmit the sailing Schedule Information to the customer</li> <li>(5) Transmit the location &amp; Ship date Information to create Rate Request Form and create Booking Particular</li> </ul>

Attachment:	(1) Customer
	(2) Data Store D2
	(3) Data Store D5
	(4) Data Store D8
	(5) Process 1.0
	(6) Process 3.0
	(7) Process 4.0
	(8) Process 5.0
	(9) Process 6.0



Table 3-8 Process Specification for Process 2.1

Process Name:	Provide Searching Alternative
Data In:	(1) Valid Log in (2) Searching Alternative Selection (3) port_name
Data Out:	(1) Carrier Name (2) Location & Ship date Information
Process:	(4) Get the validity for log in of user. (5) Get the port_name from port file. (6) Get the searching Alternative Selection of the user. (7) Pass the location and Ship date Information to search Schedule by location. (8) Pass the carrier name to search Schedule by Carrier Name.
Attachment:	(9) Customer (10) Data Store D5 (11) Process 1.0 (12) Process 2.2 (13) Process 2.3

Table 3-9 Process Specification for Process 2.2

Process Name:	Search Schedule by Location
Data In:	<ul style="list-style-type: none"> <li>(1) Location &amp; Ship Date Information</li> <li>(2) transit_time &amp; port_load</li> <li>(3) carrier name</li> </ul>
Data Out:	<ul style="list-style-type: none"> <li>(1) Location &amp; Ship Date Information</li> <li>(2) Sailing Schedule Information</li> </ul>
Process:	<ul style="list-style-type: none"> <li>(1) Get the Location &amp; Ship Date Information</li> <li>(2) Get the transit_time &amp; port_load from Schedule record and carrier name from carrier file.</li> <li>(3) Search schedule by location and transmit the Location &amp; Ship Date Information to the next process.</li> <li>(4) Transmit the Sailing Schedule Information to the customer.</li> </ul>
Attachment:	<ul style="list-style-type: none"> <li>(1) Customer</li> <li>(2) Data Store D2</li> <li>(3) Data Store D8</li> <li>(4) Process 2.1</li> <li>(5) Process 3.0</li> <li>(6) Process 4.0</li> </ul>



Table 3-10 Process Specification for Process2.3

Process Name:	Search Schedule by Carrier Name
Data In:	<ul style="list-style-type: none"> <li>(1) Carrier Name</li> <li>(2) transit_time &amp; port_load</li> <li>(3) carrier name</li> </ul>
Data Out:	<ul style="list-style-type: none"> <li>(1) Sailing Schedule Information</li> </ul>
Process:	<ul style="list-style-type: none"> <li>(1) Get Carrier Name from alternative, transit_time &amp; port_load from Schedule record and carrier name from carrier file.</li> <li>(2) Search Schedule by Carrier Name and transmit the Sailing Schedule Information to the customer.</li> </ul>
Attachment:	<ul style="list-style-type: none"> <li>(1) Customer</li> <li>(2) Data Store D2</li> <li>(3) Data Store D8</li> <li>(4) Process 2.1</li> </ul>

Table 3-11 Process Specification for Process 3.0

Process Name:	Create Rate Request Form
Data In:	<ul style="list-style-type: none"> <li>(1) Location &amp; Ship Date Information</li> <li>(2) Location Required</li> <li>(3) Expected Ship Date</li> <li>(4) port_name</li> <li>(5) Rate Requested Information</li> <li>(6) User Information</li> <li>(7) User Log in Valid</li> </ul>
Data Out:	<ul style="list-style-type: none"> <li>(1) Rate Requested</li> <li>(2) Rate Request Form</li> <li>(3) Location &amp; Ship Date Information</li> </ul>
Process:	<ul style="list-style-type: none"> <li>(1) Get the User Login Valid to allow the customer to use the company's service</li> <li>(2) Create Rate Request Form from the necessary information that kept in the history record.</li> <li>(3) Transmit the Rte Request Form to the customer</li> </ul>
Attachment:	<ul style="list-style-type: none"> <li>(1) Customer</li> <li>(2) Data Store D5</li> <li>(3) Data Store D7</li> <li>(4) Data Store D11</li> <li>(5) Process 1.0</li> <li>(6) Process 2.0</li> <li>(7) Process 4.0</li> </ul>

Table 3-12 Process Specification for Process 3.1

Process Name:	View Rate Requested
Data In:	(1) User Log in Valid (2) Rate Requested Information
Data Out:	(1) Rate Requested (2) Location & Ship Date Information
Process:	(1) Get the User Log in Valid from Checking User Log in Validity Process (2) Get Rate Requested Information from the Rate Request File. (3) View the Rate Requested to the customer (4) Transmit the Location & Ship Date Information to Creating Booking Particular Process.
Attachment:	(1) Customer (2) Data Store D7 (3) Process 1.0 (4) Process 4.0

Table 3-13 Process Specification for Process 3.2

Process Name:	Provide Location Selection
Data In:	<ul style="list-style-type: none"> <li>(1) User Log in Valid</li> <li>(2) port_name</li> <li>(3) Location Required</li> </ul>
Data Out:	<ul style="list-style-type: none"> <li>(1) Origin &amp; Destination Location</li> </ul>
Process:	<ul style="list-style-type: none"> <li>(1) Get User Log in Valid from Checking User Log in Validity Process.</li> <li>(2) Get port_name from port file and Location Required from customer</li> <li>(3) Provide the Location Selection to the customer and transmit the Origin &amp; Destination Location to Providing Shipment Details Insertion Process.</li> </ul>
Attachment:	<ul style="list-style-type: none"> <li>(1) Customer</li> <li>(2) Data Store D5</li> <li>(3) Process 1.0</li> <li>(4) Process 3.3</li> </ul>

Table 3-14 Process Specification for Process 3.3

Process Name:	Provide Shipment Details Insertion
Data In:	(1) Origin & Destination Location (2) User Information (3) Expected Ship Date (4) Location & Ship Date Information
Data Out:	(1) Shipment Details
Process:	(1) Get Location & Ship Date Information from Searching Schedule Process to create Rate Request Form. (2) Get Expected Ship Date from Customer. (3) Get Origin & Destination Location from Providing Location Selection Process to create Rate Request Form. (4) Get user information to create Rate Request form. (5) Transmit the Shipment Details to calculate Total Rate Request.
Attachment:	(1) Customer (2) Data Store D11 (3) Process 2.0 (4) Process 3.2 (5) Process 3.4

Table 3-15 Process Specification for Process 3.4

Process Name:	Calculate Total Rate Request
Data In:	(1) Shipment Details
Data Out:	(1) Rate Request Form
Process:	(1) Get Shipment Details from Providing Shipment Details Insertion Process (2) Calculate Total Rate Request by using Shipment Details (3) Transmit the Rate Request Form to the customer
Attachment:	(1) Customer (2) Process 2.0



Table 3-16 Process Specification for Process 4.0

Process Name:	Create Booking Particular
Data In:	<ul style="list-style-type: none"> <li>(1) por, dest, time</li> <li>(2) location &amp; ship date Information</li> <li>(3) User Login Valid</li> <li>(4) User Information</li> <li>(5) Port_name</li> <li>(6) B/P Shipment Details</li> <li>(7) B/P Form</li> <li>(8) Location required</li> </ul>
Data Out:	<ul style="list-style-type: none"> <li>(1) B/P Information</li> <li>(2) B/P Form</li> </ul>
Process:	<ul style="list-style-type: none"> <li>(1) Get the User Login Valid to allow the customer to use the company's service</li> <li>(2) Create the Booking Particular from the received information</li> <li>(3) Transmit B/P Information to be kept in the bp file and B/P form to the customer</li> </ul>
Attachment:	<ul style="list-style-type: none"> <li>(1) Customer</li> <li>(2) Data Store D1</li> <li>(3) Data Store D5</li> <li>(4) Data Store D11</li> <li>(5) Process 1.0</li> <li>(6) Process 2.0</li> <li>(7) Process 3.0</li> </ul>

Table 3-17 Process Specification for Process 4.1

Process Name:	Provide Location Selection
Data In:	(1) User Log in Valid (2) Location Required (3) port_name
Data Out:	(1) Origin & Destination Location
Process:	(1) Get User Log in Valid from Checking User Log in Validity Process. (2) Get the Location required from customer (3) Get the port_name from port file to provide Location Selection. (4) Pass the Origin & Destination Location to provide Booking Particular Details Insertion.
Attachment:	(1) Customer (2) Data Store D5 (3) Process 1.0 (4) Process 4.2

Table 3-18 Process Specification for Process 4.2

Process Name:	Provide Booking Particular Details Insertion
Data In:	<ul style="list-style-type: none"> <li>(1) Origin &amp; Destination Location</li> <li>(2) B/P Shipment Details</li> <li>(3) User Information</li> <li>(4) Location &amp; Ship Date Information</li> </ul>
Data Out:	<ul style="list-style-type: none"> <li>(1) B/P Details</li> </ul>
Process:	<ul style="list-style-type: none"> <li>(1) Get Location &amp; Ship Date Information from Searching Schedule Process and Origin &amp; Destination from Creating Rate Request Form Process and from Providing Location Selection Process.</li> <li>(2) Get B/P Shipment Details from customer and User Information from User File.</li> <li>(3) Provide Booking Particular Details Insertion and transmit the B/P Details to Record &amp; Create Completed B/P Process.</li> </ul>
Attachment:	<ul style="list-style-type: none"> <li>(1) Customer</li> <li>(2) Data Store D11</li> <li>(3) Process 2.0</li> <li>(4) Process 3.0</li> <li>(5) Process 4.1</li> <li>(6) Process 4.3</li> </ul>

Table 3-19 Process Specification for Process 4.3

Process Name:	Record and Create Completed B/P
Data In:	(1) B/P Details
Data Out:	(1) B/P Form (2) B/P Information
Process:	(1) Get the B/P Details to create Completed B/P. (2) Record the B/P Information to bp file. (3) Transmit B/P Form to the customer.
Attachment:	(1) Customer (2) Data Store D1 (3) Process 4.2

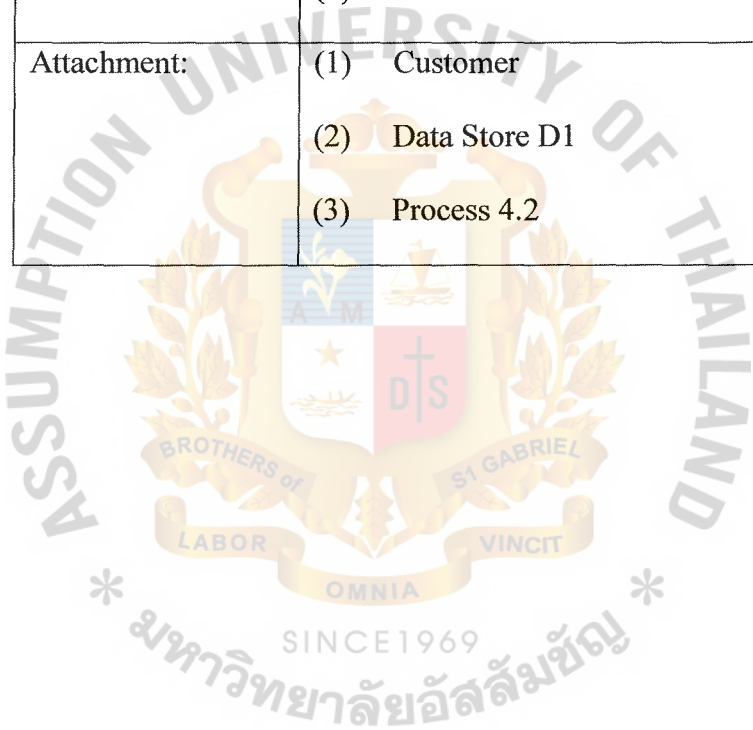


Table 3-20 Process Specification for Process 5.0

Process Name:	Search B/L & A/N Form
Data In:	(1) User Log in Valid (2) Por, Destination, Time (3) anfilename (4) blfilename (5) B/L No.
Data Out:	(1) Documents Information
Process:	(1) Get User Log in Valid to allow the customer to use the service. (2) Get anfilename, blfilename from Document file and por, destination, time from bp file (3) Search B/L and Arrival Notice from the received information (4) Transmit the copied B/L to the customer
Attachment:	(1) Customer (2) Data Store D1 (3) Data Store D3 (4) Process 1.0

Table 3-21 Process Specification for Process 5.1

Process Name:	Search B/L Details
Data In:	(1) Por, destination, time (2) User Valid Log in (3) B/L No.
Data Out:	(1) B/L Details
Process:	(1) Get User Valid Log in to allow the customer to use the service (2) Get B/L No. from the customer to use for searching the details (3) Get por, destination, and time from the bp file. (4) Search B/L Details by using the necessary details. (5) Transmit the B/L Details to the customer.
Attachment:	(1) Customer (2) Data Store D1 (3) Process 1.0

Table 3-22 Process Specification for Process 5.2

Process Name:	View Copied B/L
Data In:	(1) Blfilename
Data Out:	(1) Copied B/L
Process:	(1) Get the blfilename from Document file to view the Copied B/L. (2) Transmit the Copied B/L to the customer.
Attachment:	(1) Customer (2) Data Store D3

Table 3-23 Process Specification for Process 5.3

Process Name:	Search Arrival Notice
Data In:	(1) por, destination, time
Data Out:	(1) Arrival Notice Details
Process:	(1) Get por, destination, time from bp file (2) Search for Arrival Notice (3) Transmit the Arrival Notice Details to the customer.
Attachment:	(1) Customer (2) Data Store D1



Table 3-24 Process Specification for Process 5.4

Process Name:	View Arrival Notice Form
Data In:	(1) Anfilename (2) B/L No.
Data Out:	(1) Arrival Notice Form
Process:	(1) Get B/L No. from the customer to search for Arrival Notice Form. (2) Get anfilename from Document file to view Arrival Notice Form. (3) Send the Arrival Notice Form to the customer.
Attachment:	(1) Customer (2) Data Store D1 (3) Process 4.2

Table 3-25 Process Specification for Process 6.0

Process Name:	Manage Shipment Status & Administration
Data In:	<ul style="list-style-type: none"> <li>(1) bl_id</li> <li>(2) B/L No. or B/P No.</li> <li>(3) House B/L</li> <li>(4) Shipment Details</li> <li>(5) Sailing Schedule</li> <li>(6) Shipment Info</li> <li>(7) Transaction, date</li> <li>(8) User Log in Valid</li> </ul>
Data Out:	<ul style="list-style-type: none"> <li>(1) Anfilename &amp; blfilename</li> <li>(2) Shipment Status</li> <li>(3) Schedule Information</li> <li>(4) Shipment Details</li> <li>(5) Vessel Information</li> <li>(6) Carrier Information</li> <li>(7) Feeder Information</li> <li>(8) Port Information</li> <li>(9) Rate Information</li> </ul>
Process:	<ul style="list-style-type: none"> <li>(1) Get User Log in Valid to allow the customer to use the service.</li> <li>(2) Get the shipment's details and update the information to the file</li> <li>(3) Manage shipment Status &amp; Administration from the necessary information</li> </ul>

	(4) Record the information to the file.
Attachment:	(1) Customer (2) Admin (3) Data Store D2 (4) Data Store D3 (5) Data Store D4 (6) Data Store D5 (7) Data Store D6 (8) Data Store D8 (9) Data Store D10 (10) Data Store D12 (11) Process 1.0

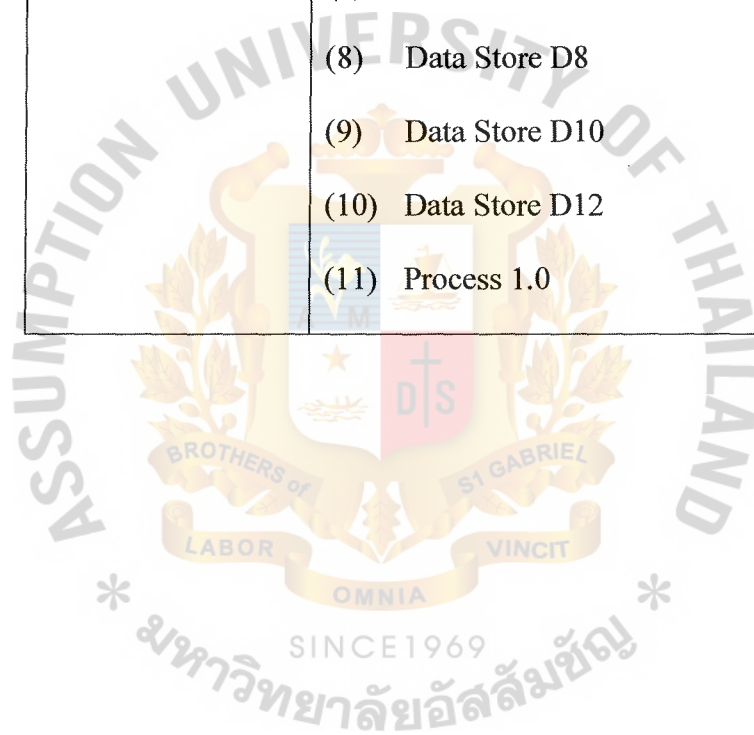


Table 3-26 Process Specification for Process 6.1

Process Name:	Search Shipment Status
Data In:	<ul style="list-style-type: none"> <li>(1) User Log in Valid</li> <li>(2) bl_id</li> <li>(3) transaction, date</li> <li>(4) B/L No. or B/P No.</li> </ul>
Data Out:	<ul style="list-style-type: none"> <li>(1) Shipment Status</li> </ul>
Process:	<ul style="list-style-type: none"> <li>(1) Get User Log in Valid to allow customer to use the service</li> <li>(2) Get B/L No. or B/P No. from the customer</li> <li>(3) Get bl_id from Document file and transaction, date from Track &amp; Trace File.</li> <li>(4) Search Shipment Status from the received information.</li> <li>(5) Transmit the Shipment Status to the customer.</li> </ul>
Attachment:	<ul style="list-style-type: none"> <li>(1) Customer</li> <li>(2) Data Store D3</li> <li>(3) Data Store D10</li> <li>(4) Process 1.0</li> </ul>

Table 3-27 Process Specification for Process 6.2

Process Name:	Add New and Update Shipment Details
Data In:	(1) Shipment Details (2) User Log in Valid
Data Out:	(1) Shipment Details
Process:	(1) Get User Log in Valid to allow Admin to add new and update the information. (2) Get Shipment Details from Admin. (3) Add new and Update Shipment Status to record in Track & Trace File.
Attachment:	(1) Admin (2) Data Store D10 (3) Process 1.0

Table 3-28 Process Specification for Process 6.3

Process Name:	Add New and Update Document
Data In:	(1) User Login Valid (2) House B/L
Data Out:	(1) Anfilename & blfilename
Process:	(1) Get User Login Valid to allow admin to add new and update the document (2) Get House B/L from Admin (3) Add new and update anfilename and blfilename to record in Document File.
Attachment:	(1) Admin (2) Data Store D3 (3) Process 1.0

Table 3-29 Process Specification for Process 6.4

Process Name:	Add New and Update Sailing Schedule
Data In:	(1) User Login Valid (2) Sailing Schedule
Data Out:	(1) Schedule Information
Process:	(1) Get User Login Valid to allow Admin to add new and update Sailing Schedule. (2) Get Sailing Schedule from Admin (3) Add new and update the Sailing Schedule and record Schedule Information to the Schedule File.
Attachment:	(1) Admin (2) Data Store D8 (3) Process 1.0



Table 3-30 Process Specification for Process 6.5

Process Name:	Add New and Update Shipment Information
Data In:	<ol style="list-style-type: none"> <li>(1) User Login Valid</li> <li>(2) Shipment Information</li> </ol>
Data Out:	<ol style="list-style-type: none"> <li>(1) Carrier Information</li> <li>(2) Feeder Information</li> <li>(3) Port Information</li> <li>(4) Rate Information</li> <li>(5) Vessel Information</li> </ol>
Process:	<ol style="list-style-type: none"> <li>(1) Get User Login Valid to allow admin to add new and update the document</li> <li>(2) Get Shipment Information from Admin</li> <li>(3) Add new and update Shipment Information</li> <li>(4) Record Carrier Information to Carrier File</li> <li>(5) Record feeder Information to feeder file</li> <li>(6) Record Port Information to Port file</li> <li>(7) Record Rate Information to Rate file</li> <li>(8) Record vessel Information to vessel file</li> </ol>

Attachment:	(1) Admin
	(2) Data Store D2
	(3) Data Store D4
	(4) Data Store D5
	(5) Data Store D6
	(6) Data Store D12
	(7) Process 1.0



Table 3-31 Process Specification for Process 7.0

Process Name:	Create MIS Report
Data In:	(1) Customer Name, period, location (2) Report Required (3) Rate Request Information (4) rr statistics information (5) rrcount, bpcount (6) Booking Particular Information (7) B/P Statistics Information (8) User Login Valid
Data Out:	(1) Customer Statistics (2) Rate Request Statistics (3) Booking Statistics (4) Management Information System Report
Process:	(1) Get the User Login Valid to allow the admin to update the data in the system (2) Create MIS report from the necessary information that received from databases. (3) View the Statistics results of any services of the company to the Admin.

Attachment:	(1) Admin (2) Data Store D1 (3) Data Store D7 (4) Data Store D9
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Table 3-32 Process Specification for Process 7.1

Process Name:	Manage Customer Statistics
Data In:	(1) Admin Login Valid  (2) Username, firstname, lastname, logincount, ratecount, bookcount, email
Data Out:	(1) Customer Statistics
Process:	(1) Get Admin Login Valid to allow Admin to Manage Customer Statistics (2) Get username, firstname, lastname, logincount, ratecount, bookcount and email from User file. (3) Manage Customer Statistics and transmit the Customer Statistics to Admin.
Attachment:	(1) Admin (2) Data Store D11 (3) Process 1.0

Table 3-33 Process Specification for Process 7.2

Process Name:	Manage Rate Request Statistics
Data In:	(1) Customer name, period, location (2) Quantity1, Quantity2, Quantity3, remark, type
Data Out:	(1) Rate Request Statistics (2) Specific Rate Request Details
Process:	(1) Get Customer name, period, and location from Admin and Quantity1, Quantity2, Quantity3, remark and type from Rate Request File. (2) Manage Rate Request Statistics and transmit Rate Request Statistics and specific Rate Request Details to Admin
Attachment:	(1) Admin (2) Data Store D7

Table 3-34 Process Specification for Process 7.2.1

Process Name:	Provide Viewing Rate Request Statistics Selection
Data In:	(1) Username (2) Customer name, period, location (3) Origin Destination
Data Out:	(1) Viewing Rate Request Statistic Requested
Process:	(1) Get username from User file, Origin destination from Rate Request File and customer name, period, location from Admin. (2) Provide Viewing Rate Request Statistics Selection (3) Transmit the viewing Rate Request Statistic Requested to view Rate Request Statistics in the next process.
Attachment:	(1) Admin (2) Data Store D7 (3) Data Store D11 (4) Process 7.2.2



Table 3-35 Process Specification for Process 7.2.2

Process Name:	View Rate Request Statistics
Data In:	(1) rr_id, date_from, date_to, time (2) Viewing Rate Request Statistic Requested
Data Out:	(1) Rate Request Statistics (2) rr_id
Process:	(1) Get rr_id, date_from, date_to, time from Rate Request file and Viewing Rate Request Statistics Requested from Providing Viewing Rate Request Statistics Selection Process. (2) View Rate Request Statistics from the received information. (3) Transmit rr_id to view specific Rate Request Details (4) Transmit Rate Request Statistics to Admin.
Attachment:	(1) Admin (2) Data Store D3 (3) Process 7.2.1 (4) Process 7.2.3

Table 3-36 Process Specification for Process 7.2.3

Process Name:	View Specific Rate Request details
Data In:	(1) rr_id (2) Quantity1, Quantity2, Quantity3, remark, type
Data Out:	(1) Specific Rate Request Details
Process:	(1) Get rr_id, from Viewing Rate Request Statistics Process (2) Get Quantity1, Quantity2, Quantity3, remark, type from Rate Request file. (3) View Specific Rate Request Details and transmit specific Rate Request Details to Admin.
Attachment:	(4) Admin (5) Data Store D7 (6) Process 7.2.2

Table 3-37 Process Specification for Process 7.3

Process Name:	Manage Booking Particular Statistics
Data In:	(1) Customer name, period, location (2) Origin destination , date_pic, date_del, bp_id, time (3) B/P Information
Data Out:	(3) Booking Statistics (4) Specific Booking Details
Process:	(1) Get Customer name, period, and location from Admin, Origin destination date_pic, date_del, bp_id and time from bp file. (2) Get B/P Information from bp file.
Attachment:	(1) Admin (2) Data Store D1

Table 3-38 Process Specification for Process 7.3.1

Process Name:	Provide Viewing Booking Statistics Selection
Data In:	(1) Username (2) Origin destination (3) Customer name, period, location
Data Out:	(1) Viewing Booking Statistics Selected
Process:	(1) Get username from user file, origin destination from bp file and customer name, period and location from Admin (2) Provide Viewing Booking Statistics Selection (3) Transmit Viewing Booking Statistics Selected to view Booking Statistics in the next process.
Attachment:	(1) Admin (2) Data Store D1 (3) Data Store D11 (4) Process 7.3.2

Table 3-39 Process Specification for Process 7.3.2

Process Name:	View Booking Statistics
Data In:	(1) bp_id, date_pic, date_del, time (2) Viewing Booking Statistics Selected
Data Out:	(1) bp_id (2) Booking Statistics
Process:	(1) Get bp_id, date_pic, date_del and time from bp file and viewing Booking Statistics Selected from Providing Viewing Booking Statistics Selection Process. (2) View Booking Statistics and Transmit bp_id to view Specific Booking Details (3) Transmit Booking Statistics to Admin.
Attachment:	(1) Admin (2) Data Store D1 (3) Process 7.3.3

Table 3-40 Process Specification for Process 7.3.3

Process Name:	View Specific Booking Details
Data In:	(1) bp_id (2) B/P Information
Data Out:	(1) Specific Booking Details (2) Booking Details
Process:	(1) Get bp_id from viewing Booking Statistics Process and B/P Information from bp file (2) View Specific Booking Details (3) Transmit Booking Details to create Booking Particular and Specific Booking Details to Admin
Attachment:	(1) Admin (2) Data Store D1 (3) Process 7.3.2 (4) Process 7.3.4

Table 3-41 Process Specification for Process 7.3.4

Process Name:	Create Booking Particular
Data In:	(1) Booking Details
Data Out:	(1) B/P
Process:	(1) Get Booking Details from viewing Specific Booking Details Process (2) Create Booking Particular (3) Transmit B/P to Admin and Customer
Attachment:	(1) Customer (2) Admin (3) Process 7.3.3

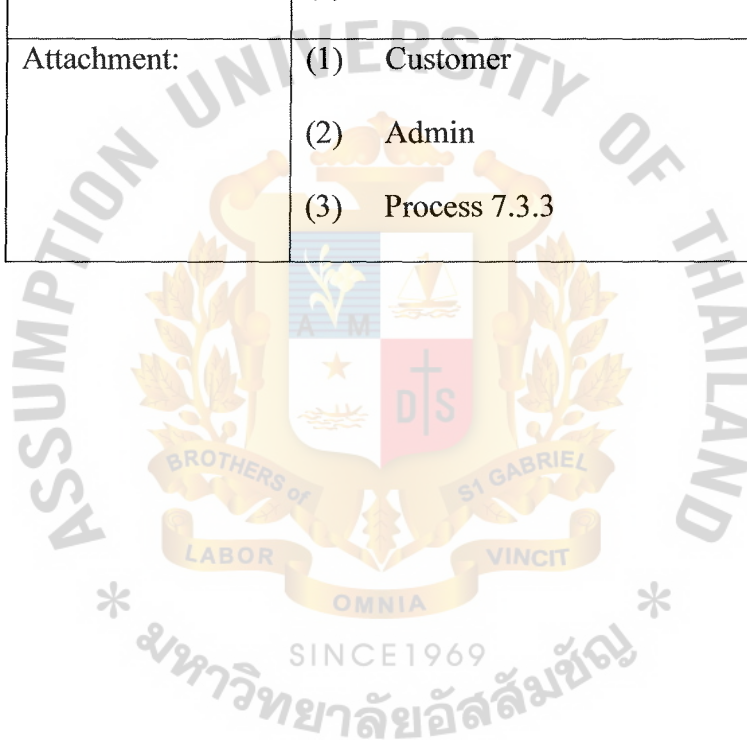




Table 3-42 Process Specification for Process 7.4

Process Name:	Create MIS Chart
Data In:	(1) Origin (2) Destination (3) date_pic, date_del (4) date_to, date_from (5) rrcount, bpcount
Data Out:	(1) Rate Request per Booking Chart (2) Rate Request per Origin Chart (3) Rate Request per Destination Chart (4) Rate Request per Month Chart (5) Booking per Origin Chart (6) Booking per Destination Chart (7) Booking per Month Chart

Process:	<p>(1) Get origin, destination and date_pic, date_del from bp file and origin, destination, date_to, date_from from Rate Request file.</p> <p>(2) Get rrcount and bpcount from Statistics Record.</p> <p>(3) Create MIS Report from the received information</p> <p>(4) Transmit Rate Request per Booking Chart, Rate Request per Origin Chart, Rate Request per Destination Chart, Rate Request per Month Chart, Booking per Origin Chart, Booking per Destination Chart and Booking per Month Chart to Admin.</p>
Attachment:	<p>(1) Admin</p> <p>(2) Data Store D1</p> <p>(3) Data Store D7</p> <p>(4) Data Store D9</p> <p>(5) Process 7.4</p>

Table 3-43 Process Specification for Process 7.5

Process Name:	Create MIS Report
Data In:	<ol style="list-style-type: none"> <li>(1) bp_id</li> <li>(2) rr_id</li> <li>(3) date_pic, date_del</li> <li>(4) B/P Statistic Information</li> <li>(5) Date_from, date_to</li> <li>(6) Report Required</li> <li>(7) Rate Request Statistics Information</li> </ol>
Data Out:	<ol style="list-style-type: none"> <li>(1) Booking Report</li> <li>(2) Rate Request Report</li> </ol>
Process:	<ol style="list-style-type: none"> <li>(1) Get bp_id, date_pic, date_del and B/P Statistic Information from bp file</li> <li>(2) Get rr_id, date_from, date_to and Rate Request Statistics Information from Rate Request File.</li> <li>(3) Get Report Required from Admin</li> <li>(4) Create MIS Report from the received file</li> <li>(5) Transmit Booking Report and Rate Request Report to Admin.</li> </ol>
Attachment:	<ol style="list-style-type: none"> <li>(1) Admin</li> <li>(2) Data Store D1</li> <li>(3) Data Store D7</li> </ol>

Table 3-44 Process Specification for Process 7.5.1

Process Name:	Select Report
Data In:	(1) rr_id (2) Report Required (3) bp_id
Data Out:	(1) rr_id (2) bp_id
Process:	(1) get rr_id from Rate Request file, bp_id from bp file and Report Required from Admin (2) Select the report and transmit the rr_id to select Rate Request and bp_id to select Booking Period in the next process.
Attachment:	(1) Admin (2) Data Store D1 (3) Data Store D7 (4) Process 7.5.2 (5) Process 7.5.4

Table 3-45 Process Specification for Process 7.5.2

Process Name:	Select Rate Request Period
Data In:	(1) date_to, date_from (2) rr_id
Data Out:	(1) rr_id, period
Process:	(1) Get date_to, date_from from Rate Request file and rr_id from selecting Report (2) Select Rate Request Period and transmit the rr_id, period to create Rate Request Report in the next process.
Attachment:	(1) Data Store D7 (2) Process 7.5.1 (3) Process 7.5.3

Table 3-46 Process Specification for Process 7.5.3

Process Name:	Create Rate Request Report
Data In:	(1) rr_id, period (2) Rate Request Statistics Information
Data Out:	(1) Rate Request Report
Process:	(1) Get rr_id and period from selecting Rate Request Period Process and Rate Request Statistics Information from Rate Request file. (2) Create Rate Request Report from the received file. (3) Transmit Rate Request Report to Admin
Attachment:	(1) Admin (2) Data Store D7 (3) Process 7.5.2

Table 3-47 Process Specification for Process 7.5.4

Process Name:	Select Booking Period
Data In:	(1) bp_id (2) date_pic, date_del
Data Out:	(1) bp_id, period
Process:	(1) Get bp_id from selecting Report and date_pic, date_del from bp file (2) Select Booking Period and transmit bp_id and period to create Booking Report in the next process.
Attachment:	(1) Data Store D1 (2) Process 7.5.1 (3) Process 7.5.5



Table 3-48 Process Specification for Process 7.5.5

Process Name:	Create Booking Report
Data In:	(1) bp_id, period (2) B/P Statistic Information
Data Out:	(1) Booking Report
Process:	(1) Get bp_id and period from selecting Booking Period and B/P Statistic Information from bp file. (2) Create Booking Report and transmit Booking Report to Admin.
Attachment:	(1) Admin (2) Data Store D1 (3) Process 7.5.4

(5) Data Dictionary

Table 3-50 Data Dictionary of Order Processing System Database

Data items	Meaning
anfilename	The address of Arrival Notice's File Name
baf	Bunker Adjustment Fee
bl_id	The Identification Number of Bill of Lading
blfilename	The address of Bill of Lading's File Name
bp	File that keeps Booking Particular Information
bp_id	The Identification Number of Booking Particular
bpcount	The counting of Booking Particular made by Customer
carrier	File that keeps Carrier Information
carrier_id	The Identification Number of carrier
carrier_name	The name of Carrier
consignee_address1	1 <sup>st</sup> Address of consignee
consignee_address2	2 <sup>nd</sup> Address of consignee

consignee_name	Name of Consignee
container	The Large mettle box designed to contain commodity for transportation by ship
date	Date of Transaction or Shipment Status
date_del	The estimate date that the commodity will be arrived the destination
date_finish	Alias to date_del
date_from	The expected date that the vessel will departed from origin port
date_pic	The estimate date that the commodity will be picked up at the origin location
date_start	Alias to date_pic
date_to	The expected date that the vessel will be arrived at destination port
destination	The Port at Destination that Jade supports the shipment service
document	File that keeps Bill of Lading's File Name and Arrival Notice's File Name (bp_id + bl_id + blfilename + anfilename)

door_fax	Number of fax of door_person
door_person	Name of Person who will be received commodity at final destination incase of service type delivered to the door
door_phone	The telephone number of door_person
door_place	The address of door_person
email	The email address of users
f_voy	Number of feeder ship assigned by carrier
feeder	File that keeps Feeder Information (feeder_id + feeder + f_voy)
feeder	The name of feeder
feeder_id	The identification number of feeder
firstname	The First Name of User
gross	Weight of commodity
gross_unit	Unit of gross
issu_customer	The customer that make booking particular
issu_fax	The number of fax of issu_customer
issu_phone	The number of telephone of issu_customer

issu_seq1	The 1 <sup>st</sup> address of issu_customer
issu_seq2	The 2 <sup>nd</sup> address of issu_customer
lastlogin	The exact time that user has logged in latest
lastname	The Last Name of User
logincount	The counting of Customer Login
measure	The number of cubic of commodity
measure_unit	The number of unit measure
nbaf	The latest cost of bunker adjusted depended on world's price (vessel's fuel)
origin	The Origin Port that Jade supports the shipment service
password	The invisible identification character of user
pod	Port of destination
pol	Port of loading
por	The port of Origin
port	The name of ports both origin and destination
port_finish	The port of destination country

port_id	The identification number of port
port_load	The port of Loading the container to the Vessel
port_name	The name of Port
port_start	The port of origin country
price	The price of each specification shipment (port_start + port_finish + type + size)
quantity1	The Quantity of Container size 20' that the customer wants
quantity2	The Quantity of Container size 40' that the customer wants
quantity3	The Quantity of Container size 45' that the customer wants
rate	File that keeps Rate Information (rate_id + port_start + port_finish + type + size + price + baf + nbaf + the)
rate_id	The identification number of Rate of each specification shipment
regdate	Date and time of user registration

remark	Any other Information that customer wants Jade to know
remark1	Alias to remark
remark2	Alias to remark
remark3	Alias to remark
remark4	Alias to remark
rr	File that keeps Rate Information (rate_id + port_start + port_finish + type + size + price + baf + nbaf + thc)
rr_id	The Identification Number of Rate Request made by Customer
rrcount	The counting of Rate Request made by customer
sch_id	The Identification Number of Schedule
schedule	File that keeps Sailing Schedule Information (sch_id + carrier_id + port_start + feeder_id + port_load + vessel_id + port_finish + date_start + date_finish + transit_time)
shipper_address1	The 1 <sup>st</sup> address of shipper
shipper_address2	The 2 <sup>nd</sup> address of shipper



shipper_name	The name of shipper
size1	The first size of container that customer select at creating Booking Particular Process
size2	The second size of container that customer select at creating Booking Particular Process
size3	The third size of container that customer select at creating Booking Particular Process
size4	The fourth size of container that customer select at creating Booking Particular Process
stat	File that keeps Statistics Information (rrcount + bpcount)
thc	The cost of Terminal Handling
time	The exact date and time that the customer access any process
Transaction	The shipment status of commodity
transit_time	The duration time that count from the first date that the commodity is transported to the last date that commodity is arrived at the final destination

tt	The file that kept the Track & Trace which inform the customer about their commodity shipment status (bl_id + transaction + date)
type	Type of the container
type1	Alias to type
type2	Alias to type
type3	Alias to type
user	The customer and Admin that has been signed in the Jade Web Site (user_id + username + password + firstname + lastname + email + user_company + user_address + user_city + user_country + user_zipcode + user_phone + user_fax + regdate + lastlogin + logincount + ratecount + bookcount + level)
user_address	The address of user
user_city	The city of user
user_company	The company name of user
user_country	The country of user

user_fax	The number of fax of user
user_id	The Identification Number of user
user_phone	The telephone number of user
user_zipcode	The zip code number of user
username	The login name of the user that use for sign in to the system
v_voy	Number of vessel assigned by carrier
vessel	The file that keeps Vessel Information
vessel	The name of vessel assigned by carrier
vessel_id	The Identification Number of vessel

Table 3-50 Data Dictionary of Freight Forwarding System Dataflow

Data items	Meaning
anfilename	The address of Arrival Notice's File Name
Arrival Notice Detail	The details about the notice that inform the customer that commodity is arrived (origin + destination + time + anfilename)
Arrival Notice Form	The Form of Arrival Notice (bl_id + vessel + shipper_name + consignee_name + gross + measure + commodity + rate)
B/L Details	The details about Bill of Lading which carrier send to Jade Logistics as a shipment confirmation (origin + destination + time + blfilename)
B/L No.	The identify number of Bill of Lading
B/P Detail	The details of Booking Particular which Jade create and submit to the customer and carrier
B/P Form	The form of Booking Particular (issu_customer + consignee_name + shipper_name + por + pol + pod + commodity + measure + gross)

B/P Information	The information of Booking Particular (issu_customer + consignee_name + shipper_name + location + type + size + quantity + commodity + measure + gross + remark)
B/P Shipment details	The details of Booking Particular which is about the delivery of commodity and address excluding port (issu_customer + consignee_name + shipper_name + type + size + quantity + commodity + measure + gross + remark)
B/P Statistics Information	The information of Booking Particular Statistics (bp_id + username + origin + destination + date_pic + date_del + time)
Blfilename	The address of Bill of Lading's File Name
Bookcount	The counting of Booking Particular made by customer
Booking Report	The report of Booking Particular Statistics for each month
Booking Statistics	The Statistics of Booking Particular
bp	File that keeps Booking Particular Information

bp_id	The Identification Number of Booking Particular
carrier	File that keeps Carrier Information
Carrier Information	The information of Carrier (carrier_id + carrier_name)
Carrier Name	The name of Carrier
Copied B/L	The copied of Bill of Lading document which submit from Jade online to the customer as a shipment confirmation
Customer Information	The information of Customer (username + password + firstname + lastname + email + user_company + user_address + user_city + user_country + user_zipcode + user_phone)
Customer Information Confirmation	The confirmation of user sign in automatically send to customer's email
Customer Information Edited	The Customer Information that are already edited and recorded to user file

Customer Login Information	The information of customer login that use in login process  (username + password)
Customer Name	Name of Customer
Customer Statistics	The counting of customer signed in to the Web Site
date_del	The estimate date that the commodity will be arrived the destination
date_from	The expected date that the vessel will departed from origin port
date_pic	The estimate date that the commodity will be picked up at the origin location
date_to	The expected date that the vessel will be arrived at destination port
Destination Location	The Location at Destination that Jade supports the shipment service
Document	File that keeps Bill of Lading's File Name and Arrival Notice's File Name  (bp_id + bl_id + blfilename + anfilename)
email	The email address of users



Expected Ship Date	Alias to date_from
feeder	File that keeps Feeder Information
Feeder Information	The Information of Feeder (feeder_id + feeder + f_voy)
firstname	The First Name of User
Freight Rate Information	The Information of Freight Rate displayed in Rate Request Form (port_start + port_finish + type + size + price)
lastname	The Last Name of User
Location	The ports and countries of Origin and Destination
Location Information	Alias to Location
Location Required	The Location that customer select to view or create Sailing Schedule, Rate Request, and Booking Particular
Logincount	The counting of Customer Login
New Customer Information	The Information of New Customer

Origin Location	The Origin Port that Jade supports the shipment service
Period	The period of time that Admin select to view the Statistics
por	The port of Origin
port	Alias to Location
Port Information	The Information of Port (port_name + type)
port_load	The port of Loading the container to the Vessel
port_name	The name of Port
quantity1	The Quantity of Container size 20' that the customer wants
quantity2	The Quantity of Container size 40' that the customer wants
quantity3	The Quantity of Container size 45' that the customer wants
rate	File that keeps Rate Information

Rate Information	The Information of Rate for each shipment  (rate_id + port_start + port_finish + type + size  + price + baf + nbaf + thc)
Rate Request Report	The report of Rate Request Statistics for each month
Rate Request Statistics Information	The Information of Rate Request Statistics  (rr_id + username + origin + destination +  date_from + date_to + time)
Rate Requested Information	The Information of Rate Request that has been made by Customer
Ratecount	The counting of Rate Request made by Customer
Remark	Any other Information that customer wants Jade to know
Report Required	The Report that Admin required to view whether the Booking Report or Rate Request Report
rr	File that keeps Rate Information
rr_id	The Identification Number of Rate Request made by Customer

Sailing Schedule Information	The Information of Sailing Schedule (sch_id + carrier_id + port_start + feeder_id + port_load + vessel_id + port_finish + date_start + date_finish + transit_time)
schedule	File that keeps Sailing Schedule Information
Searching Alternative Selection	The Alternative of Selection the Search Schedule whether the customer wants to search by Location or Carrier Name
Ship Date Information	The Information of Ship Date customer expected (date_from + date_to)
Shipment Detail	The Transaction of Shipment (transaction + date)
Specific Booking Detail	The Specification Details of Booking Particular Statistics made by individual customer (bp_id + username + shipper_name + shipper_address + consignee_name + consignee_address + issu_customer + issu_phone + measure + gross + date_pic + date_del + por + pol + pod + destination + container + remark + time)

Specific Rate Request	The Specification Details of Rate Request
Detail	Statistics made by individual customer (rr_id + user_id + origin + destination+ date_from + date_to + type + size + quantity + remark + time)
stat	File that keeps Statistics Information (rrcount + bpcount)
time	The exact date and time that the customer access any process
transit_time	The duration time that count from the first date that the commodity is transported to the last date that commodity is arrived at the final destination
tt	The file that kept the Track & Trace which inform the customer about their commodity shipment status (bl_id + transaction + date)
Type	Type of the container
User	The customer and Admin that has been signed in the Jade Web Site

User Information	<p>The information of the user that include both admin and customer.</p> <p>(user_id + username + password + firstname + lastname + email + user_company + user_address + user_city + user_country + user_zipcode + user_phone + user_fax + regdate + lastlogin + logincount + ratecount + bookcount + level)</p>
User Login Validity	The validity status that inform that the user is valid or not
Username	The login name of the user that use for sign in to the system
Validity Status	Alias to User Login Validity
vessel	The file that keeps Vessel Information
Vessel Information	<p>The Information of Vessel</p> <p>(vessel_id + vessel + v_voy)</p>
Viewing Booking	The selection of Admin to view the Booking
Statistic Selected	Particular Statistics
Viewing Rate	The selection of Admin to view the Rate
Request	Request Statistics
Statistic Requested	

(6) Interface Design

Jade web site has been designed to serve the customer service. The interface design as a user friendly for both customer and admin. The customer will be provided the information and easy steps to make searching, Rate Request and any other freight forwarding transaction. The interface design is described as follow:

- Home Page(see Appendix B Figure B-1)

The Home Page of Jade Web Page ([www.jadelogistics.com](http://www.jadelogistics.com)) welcomes the user with the greeting and, easy navigator or menu bar for the user. In the menu zone, Jade has explained for more information and the alternative in each menu such as Schedules menu has 2 alternatives for searching the schedule by the Location or by Carrier Name. For User Zone, there are 2 menus for registered user and new comer for sign in as a new user.

- Login Page (see Appendix B Figure B-2)

This page will be appeared at the first stage for logging in to the Web Site. User required to login in this page before using the next process. This result of checking user login status incase user does not log in and go directly to next page will be required to come back to this page.

- Sailing Schedule Page (see Appendix B Figure B-3)

The page display the result of searching the Sailing Schedule from whether Location or Carrier Name. This step can link to next steps which are Rate Request or Create Booking Particular.



- Create Rate Request Page (see Appendix B Figure B-4)

Provide user the information of location and shipment details that customer wants to make rate request to Jade.

- View Shipment Rate (see Appendix B Figure B-5)

Show the Details of Shipment fee and calculate sum of rate that customer has made the request. Customer can print the rate request form to be as hard copy.

- View Rate Request (see Appendix B Figure B-6)

The View Rate Request menu will show the page that gives the details of rates that have been requested by customer.

- View Booking Particular Details (see Appendix B Figure B-7)

Show the Booking that the customer has been made with the details of his/her booking.

- Create Booking Particular Page (see Appendix B Figure B-8)

Provide customer with the form to create his/her booking particular and the information which customer does not have to insert again such as customer information in Booking Person Fields. Also the remark fields for any specific requested to let Jade knows.

- Booking Particular Form (see Appendix B Figure B-9)

After customer has created the booking particular in the above step, the Booking Particular Form will be viewed to customer as a confirmation document and customer can print to keep as hard copy.

- View Tracking (see Appendix B Figure B-10)

If customer wants to track for his/her shipment status, he/she can use whether the Bill of Lading Number or Booking Number to view the latest transaction of his/her commodity. This also provides the exact date and time with second to inform the customer surely.

- Bill of Lading Tracking (see Appendix B Figure B-11)

To show the detail and copied Bill of Lading, customer need to specify the Bill of Lading Number correctly in this page.

- Bill of Lading Details (see Appendix B Figure B-12)

View the details of customer's Bill of Lading, which consists of Origin Port, Destination Port, and Time that customer made Booking. Also Link to the Copied Bill of Lading Form which customer can print it to be as a confirmation that the commodity is being shipped from Jade.

- Arrival Notice Tracking (see Appendix B Figure B-13)

To show the detail and Arrival, customer needs to specify the Bill of Lading Number correctly in this page.

- Arrival Notice Details (see Appendix B Figure B-14)

View the details of customer's Arrival Notice, which consists of Origin Port, Destination Port, and Time that customer made Booking. Also Link to the Arrival Notice Form which customer can print it to be as a confirmation that the commodity has been arrived at destination from Jade.

- Admin Home Page (see Appendix B Figure B-15)

The page for Admin to make the transaction for customer relationship management. The management Zone is providing the reports for each specification required from Jade. This Zone consist of New Rate Request and New Booking that made by customer to let Jade know the transaction, Chart is to view the ratio of transaction, and reports to submit to Manager as a Management Information System Report.

- Rate Request History (see Appendix B Figure B-16)

To view the details of Rate Requested by customer and can viewed as each individual customer Rate Request Details.

- Specific Rate Request History (see Appendix B Figure B-17)

View the details of Rate Requested by each individual customer, consisted of rate ID, username Origin Port, Destination Port, Date, Container Information, and remark.

- Searching Sailing Schedule (see Appendix B Figure B-18)

The page provides the Port and expected ship date for customer to view the schedule that they want to know by port and ship date.

- Selecting Chart Page (see Appendix B Figure B-19)

Provide 7 kinds of chart for the Admin to select and view the information system management report that they want.

- View Booking History Page (see Appendix B Figure B-20)

Let Admin to choose the way to show the Booking History Report by username, port, expected ship date, and the user requests rate.

- Selecting Report Page (see Appendix B Figure B-21)

Let Admin choosing and viewing their wanted report. There are 2 kinds of report: Rate Request Report, and Booking Report.

- Viewing Profile (see Appendix B Figure B-22)

The page shows out the selected user's information for the Admin.

- User Status Page (see Appendix B Figure B-23)

Show each user and their transaction such as how many times they have logged in, and can link to more details of each user.

- View User History (see Appendix B Figure B-24)

Let the Admin choosing their wanted user to view the user's history by using username.

- Viewing Booking History(see Appendix B Figure B-25)

The page provides the information of customer's Booking history, viewed by user id, name, port, period of shipment and the book time.

- Viewing Rate Request History (see Appendix B Figure B-26)

The page provides the information of customer's rate requested history, viewed by user id, name, port, period of shipment and the book time.

- Selecting Route for creating Booking Particular for rate (see Appendix B Figure B-27)

Provide customer to select the port that they wanted to make to booking particular by selecting the origin port and destination port.

- Selecting Route for Creating Rate Request (see Appendix B Figure B-28)

Provide customer to select the port that they wanted to make Rate Request by selecting the origin port and destination port

- Editing Profile Page (see Appendix B Figure B-29)

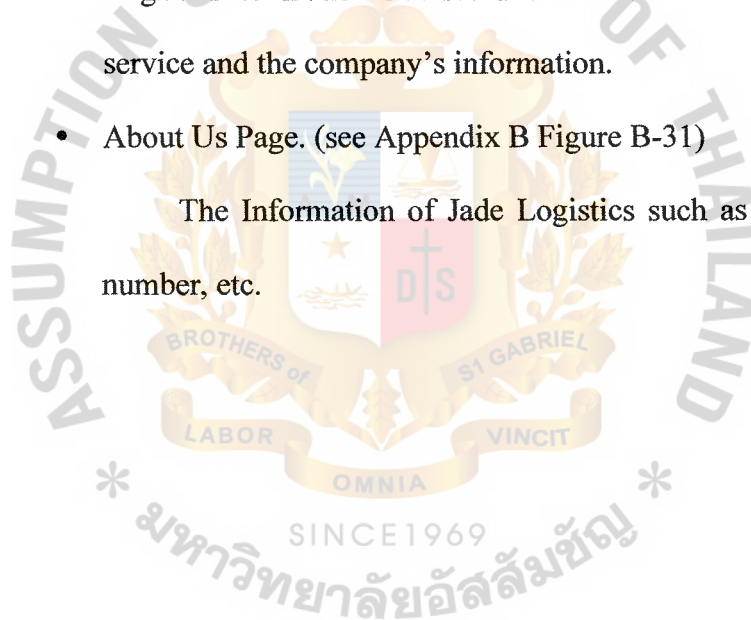
Let user to edit their information such as their password, address, etc.

- Frequency Asking Question (see Appendix B Figure B-30)

Provide the FAQ for customer about the e-service of Jade Logistics to make understand more about Freight Forwarding e-service and the company's information.

- About Us Page. (see Appendix B Figure B-31)

The Information of Jade Logistics such as address, telephone number, etc.



## (7) Report Design

The report has been designed for information system management, business transaction to review overall Jade's website transaction made by customer.

Each report is described as follow:

- Rate Request/Booking Ratio (see Appendix C Figure C-1)

This report is about the Rate Request and Booking Ratio that can forecast the trend of the customer behavior in Rate Request and Booking Behavior. Jade can know that the customer visit the website to use the Rate Request and Booking service and Jade can compare them together to improve the service to attract the customer to make booking particular more.

- Rate Request/Origin Ratio (see Appendix C Figure C-2)

This report is about the Rate Request and Origin Ratio that can report Jade about the most popular origin zone. Jade can compare where the origin port served the service more because Jade may reduce the transportation fee for the popular origin zone to booth more customer.

- Booking/Origin Ratio (see Appendix C Figure C-3)

This report is about the Booking and Origin Ratio of each customer in each origin zone. It reports Jade that how many booking that have been made in each zone, to compare the percent of booking in each zone. It can help Jade to improve service to booth more customer to make booking in that zone.



- Rate Request/Destination Ratio (see Appendix C Figure C-4)

This report is about the Rate Request and Destination Ratio in Destination port. It can report Jade that which destination zone that the customer requests for Rate Quotations mostly in order to reduce the transportation fees for the popular destination.

- Booking/Destination Ratio (see Appendix C Figure C-5)

This report is about Booking and Destination Ratio which can report Jade that which destination zone that the customers make the booking particular for transporting their commodity mostly in order to reduce the transportation fees for the popular destination and increase the quantity of carriers at that zone.

- Rate Request/Month Ratio (see Appendix C Figure C-6)

This report is about Rate Request and Month Ratio which can report Jade that which month that the customers request for Rate Quotations mostly, in order to increase the quantity of carriers at that month and bargain the carriers to reduce the transportation fees.

- Booking/Month Ratio (see Appendix C Figure C-7)

This report is about Booking and Month Ratio which can report Jade that which month that the customers make booking particular mostly, in order to increase the quantity of carriers to serve the customers adequately and bargain the carriers to reduce the transportation fees.

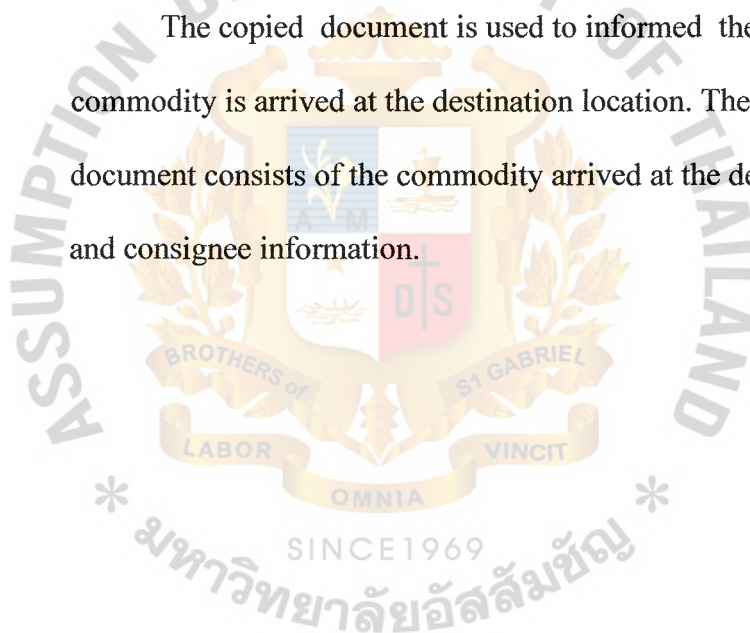


- Bill of Lading (see Appendix C Figure C-8)

The copied document is used between Jade and its customer as a confirmation that customer shipment is being delivered by the carrier. The document informs the customer about the shipment information, the exporter and consignee information and bill of lading number. The document is altered from the carrier's Bill of Lading. The information inside comes from carrier only. Jade can't change any information in Bill of Lading.

- Arrival Notice (see Appendix C Figure C-9)

The copied document is used to inform the customer that the commodity is arrived at the destination location. The information of the document consists of the commodity arrived at the destination, exporter and consignee information.



## IV. SYSTEM IMPLEMENTATION

### 4.1 Overview of the System Implementation

As Freight Forwarding business now For Thailand, it is needed to contact each party and Custom Clearance using the hard copy of document so Jade's web base application would help the company to run the business transaction easier but not for the whole transaction. After apply the web base application

#### (1) Installing Apache

You just open it like usual and the setup wizard will open and install the server for you. Since Apache has just started making Windows versions, the code is not as stable as it is for UNIX. Windows support is entirely experimental, and is recommended only for experienced users. The Apache Group does not guarantee that this software will work as documented, or even at all.

During the installation, you will be asked for

- the directory to install Apache into
- the start menu name
- The installation type. Typical installs everything except the source code.

Minimum doesn't install the manuals or source code, and Custom allows you to 'customize' what is installed.

## (2) Installing MySQL on Windows

The MySQL server for Windows is available in two distribution types:

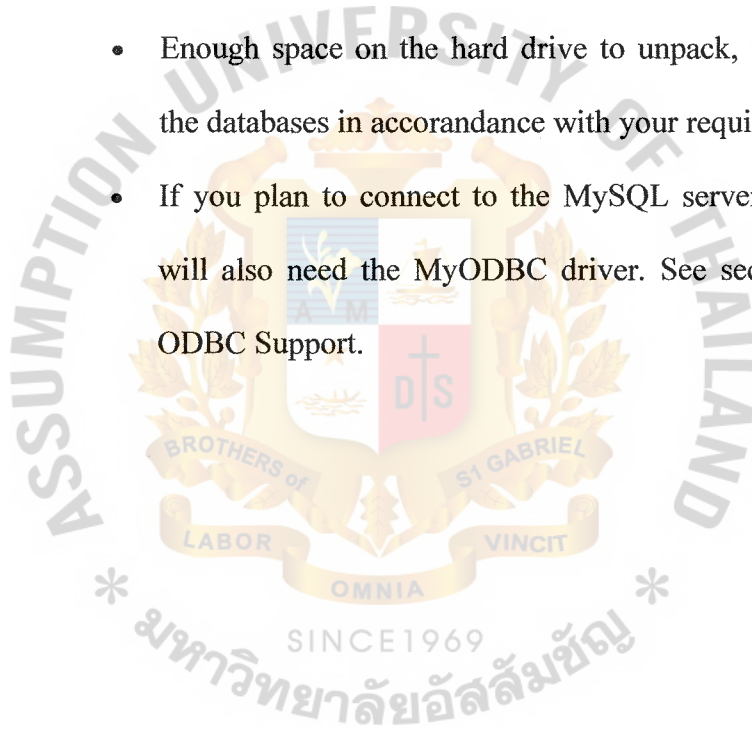
- The binary distribution contains a setup program which installs everything you need so that you can start the server immediately.
- The source distribution contains all the code and support files for building the executables using the VC++ 6.0 compiler. See section 2.3.7 Windows Source Distribution.

Generally speaking, you should use the binary distribution.

You will need the following:

- A 32-bit Windows Operating System such as 9x, Me, NT, 2000, or XP. The NT family (NT, Windows 2000 and XP) permits running the MySQL server as a service. See section 2.6.2.2 Starting MySQL on Windows NT, 2000 or XP. If you want to use tables bigger than 4G, you should install MySQL on an NTFS or newer file system. Don't forget to use MAX\_ROWS and AVG\_ROW\_LENGTH when you create the table. See section 6.5.3 CREATE TABLE Syntax. TCP/IP protocol support.

- A copy of the MySQL binary or distribution for Windows, which can be downloaded from <http://www.mysql.com/downloads/>. Note: The distribution files are supplied with a zipped format and we recommend the use of an adequate FTP client with resume feature to avoid corruption of files during the download process.
- A ZIP program to unpack the distribution file.
- Enough space on the hard drive to unpack, install, and create the databases in accordance with your requirements.
- If you plan to connect to the MySQL server via ODBC, you will also need the MyODBC driver. See section 8.3 MySQL ODBC Support.



### (3) Installing the Binaries

- If you are working on an NT/2000/XP server, logon as a user with administrator privileges.
- If you are doing an upgrade of an earlier MySQL installation, it is necessary to stop the server. If you are running the server as a service, use: `C:\> NET STOP MySQL` Otherwise, use: `C:\mysql\bin> mysqladmin -u root shutdown`
- On NT/2000/XP machines, if you want to change the server executable (e.g., -max or -nt), it is also necessary to remove the service:  
`C:\mysql\bin> mysqld-max-nt --remove`
- Unzip the distribution file to a temporary directory.
- Run the 'setup.exe' file to begin the installation process. If you want to install into another directory than the default 'c:\mysql', use the Browse button to specify your preferred directory.
- Finish the install process.

#### (4) Installing PHP

The following steps should be performed on all installations before the server specific instructions.

- Extract the distribution file to a directory of your choice. `c:\php\` is a good start. You probably do not want to use a path in which spaces are included (for example: `c:\program files\php` is not a good idea). Some web servers will crash if you do.
- You need to ensure that the DLLs which PHP uses can be found. The precise DLLs involved depend on which web server you use and whether you want to run PHP as a CGI or as a server module. `Php4ts.dll` is always used. If you are using a server module (e.g. ISAPI or Apache) then you will need the relevant DLL from the SAPI folder. If you are using any PHP extension DLLs then you will need those as well. To make sure that the DLLs can be found, you can either copy them to the system directory (e.g. `winnt/system32` or `windows/system`) or you can make sure that they live in the same directory as the main PHP executable or DLL your web server will use (e.g. `php.exe`, `php4apache.dll`).

The PHP binary, the SAPI modules, and some extensions rely on external DLLs for execution. Make sure that these DLLs in the distribution exist in a directory that is in the Windows PATH. The best bet to do it is to copy the files below into your system directory, which is typically: c:\windows\system for Windows 9x/ME c:\winnt\system32 for Windows NT/2000 c:\windows\system32 for Windows XP

The files to copy are: php4ts.dll, if it already exists there, overwrite it

The files in your distribution's 'dlls' directory. If you have them already installed on your system, overwrite them only if something doesn't work correctly (Before overwriting them, it is a good idea to make a backup of them, or move them to another folder - just in case something goes wrong).

Download the latest version of the Microsoft Data Access Components (MDAC) for your platform, especially if you use Microsoft Windows 9x/NT4. MDAC is available at <http://www.microsoft.com/data/>.

- Copy your chosen ini file (see below) to your '%WINDOWS%' directory on Windows 9x/Me or to your '%SYSTEMROOT%' directory under Windows NT/2000/XP and rename it to php.ini. Your '%WINDOWS%' or '%SYSTEMROOT%' directory is typically: c:\windows for Windows 9x/ME/XP c:\winnt or c:\winnt40 for NT/2000 servers



- There are two ini files distributed in the zip file, `php.ini-dist` and `php.ini-optimized`. We advise you to use `php.ini-optimized`, because we optimized the default settings in this file for performance, and security. The best is to study all the ini settings and set every element manually yourself. If you would like to achieve the best security, then this is the way for you, although PHP works fine with these default ini files.
- Edit your new `php.ini` file:
  - You will need to change the `'extension_dir'` setting to point to your `php-install-dir`, or where you have placed your `php_*.dll` files. ex: `c:\php\extensions`
  - If you are using OmniHTTPd, do not follow the next step. Set the `'doc_root'` to point to your web servers' `document_root`. For example: `c:\apache\htdocs` or `c:\webroot`
  - Choose which extensions you would like to load when PHP starts. See the section about Windows extensions, about how to set up one, and what is already built in. Note that on a new installation it is advisable to first get PHP working and tested without any extensions before enabling them in `php.ini`.

- On PWS and IIS, you can set the browscap.ini to point to:  
c:\windows\system\inetsrv\browscap.ini on Windows  
9x/Me, c:\winnt\system32\inetsrv\browscap.ini on  
NT/2000, and c:\windows\system32\inetsrv\browscap.ini on  
XP.
- Note that the mibs directory supplied with the Windows  
distribution contains support files for SNMP. This directory  
should be moved to DRIVE:\usr\mibs (DRIVE being the  
drive where PHP is installed.)
- If you're using NTFS on Windows NT, 2000 or XP, make  
sure that the user running the web server has read  
permissions to your php.ini (e.g. make it readable by  
Everyone).
- For PWS give execution permission to the web root:
  - Start PWS Web Manager
  - Edit Properties of the "Home"-Directory
  - Select the "execute"-Checkbox

## 4.2 Test Plan

### (1) Testing Validity

The system will check automatically that user is valid or not by getting the information from the database to check. If the user is valid, the system will allow the user to use the service but if the user is invalid, the system will ask for the user to sign up first.

The system will check that the user name and password are matched or not. If the user name and password aren't matched with the database, the system will inform that the user name and password aren't correct, so the user has to fill in them again.

### (2) Testing Accuracy

The system will check automatically that the user fill in the data correctly or not. If the data is correct, the system will record the user information to the database. If the data is incorrect, the system will inform the user that the data is incorrect; the user has to fill in the new data again.

### (3) Testing Verification

The system will check that the user log in or not. If the user haven't logged on yet, the system won't allow the user to use the service, when the user ask for using the service, the system will also inform the user to log on before using the service

### (4) Testing Username Overlap

The system will check that the username is already exists or not. If the user name is exists, the system will inform the user to change the user name again.

## V. CONCLUSIONS AND RECOMMENDATIONS

### 5.1 Conclusions

Because of the prototype of the company, it can't make a good service. But when we develop the new system which is the web page, it can solve many problems and it has advantages and disadvantages of the system.

For the problem of document delivered, both in domestics and international can pass the copied document to be as a confirmation from Jade's webpage and print out directly. The accuracy of typing also reduced because Jade can get the customer information and their shipment information from their own typing then transfer to be the real document. As the project provided the administration zone for Jade's administrative, this helps administrative to track and record the database easier. Finally, the time limitation in doing international business is solved as the website is online 24 hours and available to serve the customer at their convenience time.

The advantages of the system are we can solve for problem that makes the service for the company isn't good as we can, so, when we develop the website, the quality of any service is better, and we can reduce the cost of documentation in the long run. The important advantage is the customer can get the information faster than the past and can use the service from everywhere around the world. But for the disadvantages are we have to invest for the developing website at the beginning, we have to hire more employees to do the job only in this website.

The new website is more challenge for the freight forwarding company because the company can be an advance company than other company and may attract the customers to use the service.

## 5.2 Recommendations

There are many recommendations to inform to the executive of the company to improve the system of the company in order to attract the customers to use the service. Because of the freight forwarding is the complex business and high competition, the problem can occur anytime. So, we have recommendations to inform you to improve the company as follows:

- (1) The company should use the computer based to reduce the damage of documentations.
- (2) The company should train the employee before hiring them to give the service.
- (3) The company should hire the skilled worker to be supervisor in the specific field in the company.
- (4) The company should advertise that the company has the new service as the website and give the information of the new webpage of the company briefly to be more attractive.

## BIBLIOGRAPHY

Tepprasit, Suvit. General Manager, Hyundai Merchant Marine. Interview, 29 November, 2002.

Excellent Business Corporation International Co., Ltd. **Shipping and Customs**. Bangkok, 1995.

**PHP Manual**, <http://www.php.net>

**MySQL Manual**, <http://www.mysql.com>

Managing Users with PHP Sessions and MySQL, <http://www.sitepoint.com/article/319/>

PHPBuliders.com – The Resources for PHP Developers, <http://phpbuilder.net/>

Logistics Manager, January 15, 2003, Volume 6 Issue 4



APPENDIX A  
DATABASE DESIGN



Table A-1 bp Table

No.	Field Name	Field Type	Index	Unique	Nullable	Validity Check	Key Type	FK Referenced Table
1	bp_id	mediumint(8)	Y				PK	
2	user_id	mediumint(8)					FK	user
3	shipper_name	varchar(100)						
4	shipper_address1	varchar(100)						
5	shipper_address2	varchar(100)			Y			
6	consignee_name	varchar(100)						
7	consignee_address1	varchar(100)						
8	consignee_address2	varchar(100)			Y			
9	issu_customer	varchar(50)						
10	issu_phone	bigint(10)						
11	issu_fax	bigint(10)						
12	issu_seq1	varchar(100)						
13	issu_seq2	varchar(100)						
14	commodity	varchar(100)						
15	measure	int(8)			Y			
16	measure_unit	varchar(4)						
17	gross	int(8)			Y			
18	gross_unit	varchar(4)						
19	date_pic	date				YYYY-MM-DD		
20	date_del	date				YYYY-MM-DD		
21	por	varchar(50)						
22	pol	varchar(50)			Y			
23	pod	varchar(50)			Y			
24	destination	varchar(50)						
25	container	varchar(50)						

26	serorg	varchar(20)						
27	serdes	varchar(20)						
28	type1	varchar(10)						
29	size1	int(2)						
30	quantity1	int(8)						
31	type2	varchar(10)			Y			
32	size2	int(2)			Y			
33	quantity2	int(8)			Y			
34	type3	varchar(10)			Y			
35	size3	int(2)			Y			
36	quantity3	int(8)			Y			
37	remark1	varchar(200)			Y			
38	remark2	varchar(200)			Y			
39	remark3	varchar(200)			Y			
40	remark4	varchar(200)			Y			
41	time	datetime				YYYY-MM-DD HH:MM:SS		

Table A-2 carrier Table

No.	Field Name	Field Type	Index	Unique	Nullable	Validity Check	Key Type	FK Referenced Table
1	<u>carrier_id</u>	tinyint(4)	Y				PK	
2	carrier_name	varchar(100)		Y				

Table A-3 document Table

No.	Field Name	Field Type	Index	Unique	Nullable	Validity Check	Key Type	FK Referenced Table
1	<u>bl_id</u>	mediumint(8)	Y				PK	

2	bp_id	mediumint(8)					FK	bp
3	blfilename	varchar(20)		Y				
4	anfilename	varchar(20)		Y				

Table A-4 feeder Table

No.	Field Name	Field Type	Index	Unique	Nullable	Validity Check	Key Type	FK Referenced Table
1	feeder_id	tinyint(4)	Y	Y			PK	
2	feeder	varchar(50)		Y				
3	f_voy	varchar(6)		Y				

Table A-5 port

No.	Field Name	Field Type	Index	Unique	Nullable	Validity Check	Key Type	FK Referenced Table
1	port_id	mediumint(4)					PK	
2	port_name	varchar(50)		Y				
3	type	tinyint(1)						

Table A-6 rate Table

No.	Field Name	Field Type	Index	Unique	Nullable	Validity Check	Key Type	FK Referenced Table
1	rate_id	tinyint(4)	Y				PK	
2	port_start	varchar(50)						
3	port_finish	varchar(50)						
4	type	varchar(20)						
5	size	tinyint(4)						

6	price	int(8)						
7	baf	int(5)						
8	nbafe	int(5)						
9	thc	int(8)						

Table A-7 rr Table

No.	Field Name	Field Type	Index	Unique	Nullable	Validity Check	Key Type	FK Referenced Table
1	rr_id	mediumint(8)	Y				PK	
2	user_id	mediumint(8)					FK	user
3	origin	varchar(50)						
4	destination	varchar(50)						
5	date_from	date				YYYY-MM-DD		
6	date_to	date				YYYY-MM-DD		
7	type	varchar(20)						
8	size	tinyint(2)						
9	quantity	tinyint(4)						
10	period	varchar(10)						
11	container	varchar(50)						
12	remark	varchar(255)			Y			
13	rate_id	tinyint(4)					FK	rate
14	time	date				YYYY-MM-DD		

Table A-8 schedule Table

No.	Field Name	Field Type	Index	Unique	Nullable	Validity Check	Key Type	FK Referenced Table
1	sch_id	tinyint(4)	Y				PK	

2	carrier_id	tinyint(2)					FK	carrier
3	port_start	varchar(50)						
4	feeder_id	tinyint(4)			Y		FK	feeder
5	port_load	varchar(50)			Y			
6	vessel_id	tinyint(4)					FK	vessel
7	port_finish	varchar(50)						
8	date_start	date				YYYY-MM-DD		
9	date_finish	date				YYYY-MM-DD		
10	transit_time	int(3)						

Table A-9 stat Table

No.	Field Name	Field Type	Index	Unique	Nullable	Validity Check	Key Type	FK Referenced Table
1	rrcount	int(8)	Y				PK	
2	bpcount	int(8)					PK	

Table A-10 tt Table

No.	Field Name	Field Type	Index	Unique	Nullable	Validity Check	Key Type	FK Referenced Table
1	bl_id	varchar(15)	Y				PK	
2	transaction	varchar(200)					PK	
3	date	date				YYYY-MM-DD		

Table A-11 user Table

No.	Field Name	Field Type	Index	Unique	Nullable	Validity Check	Key Type	FK Referenced Table
1	user_id	char (10)	Y				PK	



2	username	varchar(32)		Y				
3	password	varchar(16)						
4	firstname	varchar(25)						
5	lastname	varchar(25)						
6	email	varchar(100)						
7	user_company	varchar(50)						
8	user_address	longtext						
9	user_city	varchar(25)						
10	user_country	varchar(25)						
11	user_zipcode	int(5)				99999		
12	user_phone	bigint(10)				9999999999		
13	user_fax	bigint(10)				9999999999		
14	regdate	datetime				YYYY-MM-DD HH:MM:SS		
15	lastlogin	datetime				YYYY-MM-DD HH:MM:SS		
16	logincount	int(8)						
17	ratecount	int(8)						
18	bookcount	int(8)						
19	level	tinyint(1)						

Table A-12 vessel Table

No.	Field Name	Field Type	Index	Unique	Nullable	Validity Check	Key Type	FK Referenced Table
1	vessel_id	tinyint(4)	Y				PK	
2	vessel	varchar(50)						
3	v_voy	varchar(6)						



APPENDIX B  
INTERFACE DESIGN



# JADE LOGISTICS®

Home Schedules RateRequest Booking BillofLading Tracking ArrivalNotice FAQ AboutUs

**Jade Logistics** would like to present you a specialized, integrated services Jade Logistics, Thailand website. An objectives are to do business fast, accurately and efficiently.

Let us provide you with a full array of total logistics and transportation services that are tailor-made to meet your precise requirements, leaving you free to concentrate on your core business activities. Please find the detail of how we can contribute you and how our services meet your requirements.

[User Home](#)

[Sign up](#) [Log in](#)

## Schedules



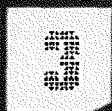
Check sailing schedules, including specific times and vessels.  
[Search schedules by Origin & Destination](#)  
[Carrier name](#)

## Rate Request



For comparison, check out our selected rates.  
[View Rate](#)  
[Create Rate](#)

## Booking



Use our booking service and save valuable time.  
[View bookings](#)  
[Create Booking](#)

## Tracking



Real time tracking of your shipment.  
[View Shipment](#)

## Bill of Lading



Verify your bills of lading and view your approved copies.  
[View Bill of Lading](#)

## Arrival Notice



Estimate your cargo's arrival date all over the world, 24 hours a day.  
[View Arrival Notice](#)

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Figure B-1 Home Page

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Home Schedules RateRequest Booking BillOfLading Tracking ArrivalNotice FAQ AboutUs [Sign up](#)

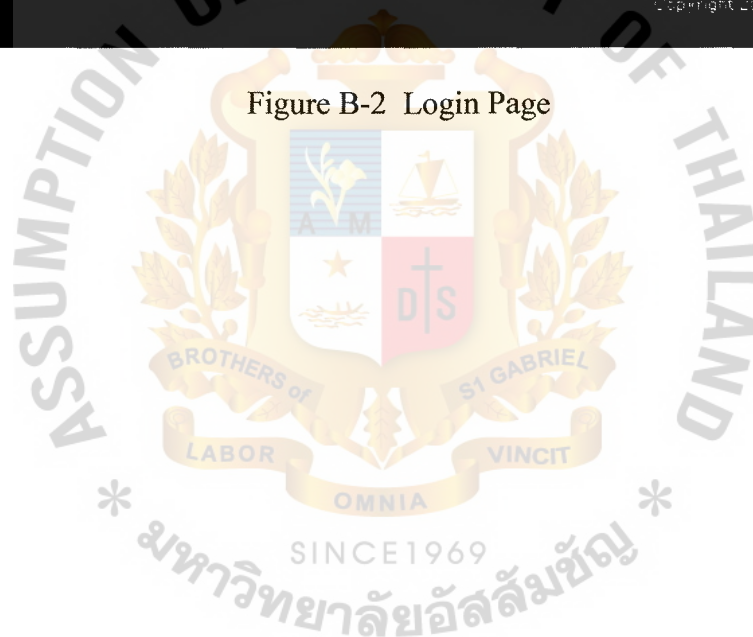
Log in

Username	<input type="text"/>
Password	<input type="password"/>
Log in	Reset

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Figure B-2 Login Page



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Sealing schedules

No.	Origin	Departure date	Loading	Vessel	Destination	Transit time	Rate	Book
1	LAEM CHABANG, THAILAND	2003-01-19	PROT LOUIS, MAURITIUS	SL VOYGER	CAPE TOWN, SOUTH AFRICA	35	Rate	Book
2	LAEM CHABANG, THAILAND	2003-01-22	PROT LOUIS, MAURITIUS	SL VOYGER	CAPE TOWN, SOUTH AFRICA	32	Rate	Book
3	LAEM CHABANG, THAILAND	2003-01-26	PROT LOUIS, MAURITIUS	SAFMARINE CUNENE	CAPE TOWN, SOUTH AFRICA	35	Rate	Book
4	LAEM CHABANG, THAILAND	2003-01-29	PROT LOUIS, MAURITIUS	SAFMARINE CUNENE	CAPE TOWN, SOUTH AFRICA	32	Rate	Book

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Figure B-3 Sailing Schedule Page

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Rate Request

Origin	Location	LAEM CHABANG, THAILAND
Destination	Location	CAPE TOWN, SOUTH AFRICA
Container Size/Volumn	20' / 0 40' / 0 45' / 0	
Expected Ship-date	From : JAN 19 2003 To : JAN 19 2003	
Container Type	Dry	
Special Remark		

Submit
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Figure B-4 Create Rate Request Page



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Lakna Teprasit  
15 Missteen Rd.  
Bangkok Thailand  
27888

Dear Lakna Teprasit

In response to your recent inquiry, we are pleased to submit the quotation for ocean freight from BANGKOK, (PAT) THAILAND to BAHRAIN, BAHRAIN.

Price lists

No.	Type	Size	Ocean freight	Bunker adjustment factor	New Bunker adjustment factor	Terminal handling charge
1	DRY	20	\$400	\$400	\$400	400 Baht
2	DRY	40	\$400	\$400	\$400	400 Baht
3	DRY	45	\$400	\$400	\$400	400 Baht

You have requested for container : DRY

Container Size	Quantity	Total
20	2	\$800
40	3	\$1200
45	1	\$400
Sum		\$2400

Bill of Lading is 500 baht per set  
(Credit term 2 weeks, Excluded VAT)


This quotation is valid through 06-12-2003 (90 days period) and subject to be changed with prior notice. We sincerely appreciate your inquiry. If you need additional information, please feel free to call me at 06-100-7814.

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OMNIA

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Figure B-5 View Shipment Rate



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[FAQ](#)
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Logout

View Requested Rate

No.	RequestID	Origin	Destination	Start	Until	Request time
1	4	LAEM CHABANG, THAILAND	SOUTHAMPTON, U.K.	2003-01-19	2003-01-19	2003-02-24 02:09:41
2	5	BANGKOK, (PAT) THAILAND	SOUTHAMPTON, U.K.	2003-01-19	2003-01-19	2003-02-24 02:09:52
3	6	BANGKOK, (PAT) THAILAND	SOUTHAMPTON, U.K.	2003-01-19	2003-01-19	2003-02-24 02:10:06
4	7	LAEM CHABANG, THAILAND	SOUTHAMPTON, U.K.	2003-01-19	2003-01-19	2003-02-24 02:10:11
5	8	LAEM CHABANG, THAILAND	SOUTHAMPTON, U.K.	2003-01-19	2003-01-19	2003-02-24 02:10:14
6	9	LAEM CHABANG, THAILAND	SOUTHAMPTON, U.K.	2003-01-19	2003-01-19	2003-02-24 02:10:16
7	10	LAEM CHABANG, THAILAND	SOUTHAMPTON, U.K.	2003-01-19	2003-01-19	2003-02-24 02:10:18
8	11	LAEM CHABANG, THAILAND	SOUTHAMPTON, U.K.	2003-01-19	2003-01-19	2003-02-24 02:10:20
9	13	LAEM CHABANG, THAILAND	BAHRAIN, BAHRAIN	2003-01-19	2003-01-19	2003-02-25 01:04:55
10	14	LAEM CHABANG, THAILAND	BAHRAIN, BAHRAIN	2003-01-19	2003-01-19	2003-02-25 01:07:41
11	15	LAEM CHABANG, THAILAND	SOUTHAMPTON, U.K.	2003-01-19	2003-01-19	2003-02-25 01:10:34
12	16	LAEM CHABANG, THAILAND	SOUTHAMPTON, U.K.	2003-01-19	2003-01-19	2003-02-25 01:12:40
13	17	LAEM CHABANG, THAILAND	BAHRAIN, BAHRAIN	2003-01-19	2003-01-19	2003-02-25 01:14:24
14	18	LAEM CHABANG, THAILAND	BAHRAIN, BAHRAIN	2003-01-19	2003-01-19	2003-02-25 01:15:05
15	19	LAEM CHABANG, THAILAND	BAHRAIN, BAHRAIN	2003-01-19	2003-01-19	2003-02-25 01:15:32
16	20	LAEM CHABANG, THAILAND	BAHRAIN, BAHRAIN	2003-01-19	2003-01-19	2003-02-25 01:18:52
17	21	LAEM CHABANG, THAILAND	BAHRAIN, BAHRAIN	2003-01-19	2003-01-19	2003-02-25 01:37:34
18	22	LAEM CHABANG, THAILAND	BAHRAIN, BAHRAIN	2003-01-19	2003-01-19	2003-02-25 01:40:42
19	23	LAEM CHABANG, THAILAND	BAHRAIN, BAHRAIN	2003-01-19	2003-01-19	2003-02-25 01:41:36
20	24	LAEM CHABANG, THAILAND	SYDNEY, AUSTRALIA	2003-01-19	2003-01-19	2003-02-25 01:44:11
21	25	LAEM CHABANG, THAILAND	BAHRAIN, BAHRAIN	2003-01-19	2003-01-19	2003-02-25 01:45:03
22	26	LAEM CHABANG, THAILAND	BAHRAIN, BAHRAIN	2003-01-19	2003-01-19	2003-02-25 02:06:14
23	27	LAEM CHABANG, THAILAND	SYDNEY, AUSTRALIA	2003-01-19	2003-01-19	2003-02-25 02:06:22
24	28	BANGKOK, (PAT) THAILAND	SYDNEY, AUSTRALIA	2003-01-19	2003-01-19	2003-02-25 02:06:32
25	29	LAEM CHABANG, THAILAND	SYDNEY, AUSTRALIA	2003-01-19	2003-01-19	2003-02-25 02:17:00
26	30	BANGKOK, (PAT) THAILAND	BAHRAIN, BAHRAIN	2003-01-19	2003-01-19	2003-02-25 02:17:05

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Figure B-6 View Rate Request

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View Booking

No.	BookID	Origin	Destination	Start	Until	Book time
1	0000007	LAEM CHABANG, THAILAND	SOUTHAMPTON, U.K.	2003-01-01	2003-01-01	2003-02-24 02:07:17
2	0000008	LAEM CHABANG, THAILAND	SOUTHAMPTON, U.K.	2003-01-01	2003-01-01	2003-02-24 02:08:39

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Figure B-7 View Booking Particular Details



## Create Booking

Shipper	*Name				
	*Address				
Consignee	*Name				
	*Address				
Booking Person	Name	Lakna Tepprasit			
	*Phone No	6629464678			
	Fax No	6629464679			
	Address	15 Missteen Rd. Bangkok Thailand 27888			
Cargo (Commodity)	* Description				
Measure	Volume, Unit	<input type="text"/> <input type="radio"/> cbm <input type="radio"/> ft			
Gross	Weight, Unit	<input type="text"/> <input type="radio"/> kgs <input type="radio"/> lbs			
Transportation	* Estimated Pick up at	JAN	1	2003	MM/DD/YYYY
	* Estimated Delivery at	JAN	1	2003	MM/DD/YYYY

Service Type	Vessel / Voyage			
	* Place of Origin (POR)	LAEM CHABANG, THAILAND		
	* Place of Delivery	CAPE TOWN, SOUTH AFRICA		
Door	* Origin	-----Select-----		
	* Destination	-----Select-----		
Container Detail	Place			
	Contact Person			
	Phone No.			
	Fax No.			
Remark	* Ownership	Carrier Owned(CO)		
	Type	Size	Quantity	
	* Type/Size/Quantity			

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Figure B-8 Create Booking Particular



Orawan Vongsubtavee  
15 Mahachai Mahachai  
Bangkok Thailand  
15450

Dear Orawan Vongsubtavee

In response to your recent booking, we are pleased to serve you an ocean freight from to

Shipper	*Name	Orawan Vongsubtavee
	*Address	15 Mahachai Mahachai Bangkok Thailand 15450
Consignee	*Name	Lakna Teprasil
	*Address	146 Kigston Street UK NW3 3RP
Booking Person	Name	Orawan Vongsubtavee
	*Phone No	6627447285
	Fax No	6627447286
	Address	15 Mahachai Mahachai Bangkok Thailand 15450
Cargo (Commodity)	* Description	Cotton
Measure	Volume, Unit	
Gross	Weight, Unit	
Transportation	* Estimated Pick up at	2003-01-01
	* Estimated Delivery at	2003-05-01
	Vessel / Voyage	/
	* Place of Origin (POR)	BANGKOK, (PAT) THAILAND
	Port of Loading (POL)	
	Port of Discharging (POD)	
Service Type	* Place of Delivery	BAHRAIN, BAHRAIN
	* Origin	CY
	* Destination	CY
Door	Place	
	Contact Person	
	Phone No.	
	Fax No.	
Container Detail	* Ownership	CARRIER OWNED
	* Type/Size/Quantity	Type Size Quantity DRY 20 4

Figure B-9 Booking Particular Form



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Track and Trace for 1  

No.	Transaction	Date
1	released to shipper for cargo stuffing	2003-02-23 00:00:00
2	received at origin BANGKOK, (PAT) THAILAND	2003-02-24 00:00:00
3	departed to SINGAPORE	2003-02-27 00:00:00
4	arrived at SINGAPORE	2003-02-29 00:00:00
5	shipped on APL AGATE 110W and departed to BREMERHAVEN, GERMANY	2003-03-08 00:00:00
6	arrived at discharge port BREMERHAVEN, GERMANY	2003-03-14 01:33:32

  
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Figure B-10 View Tracking

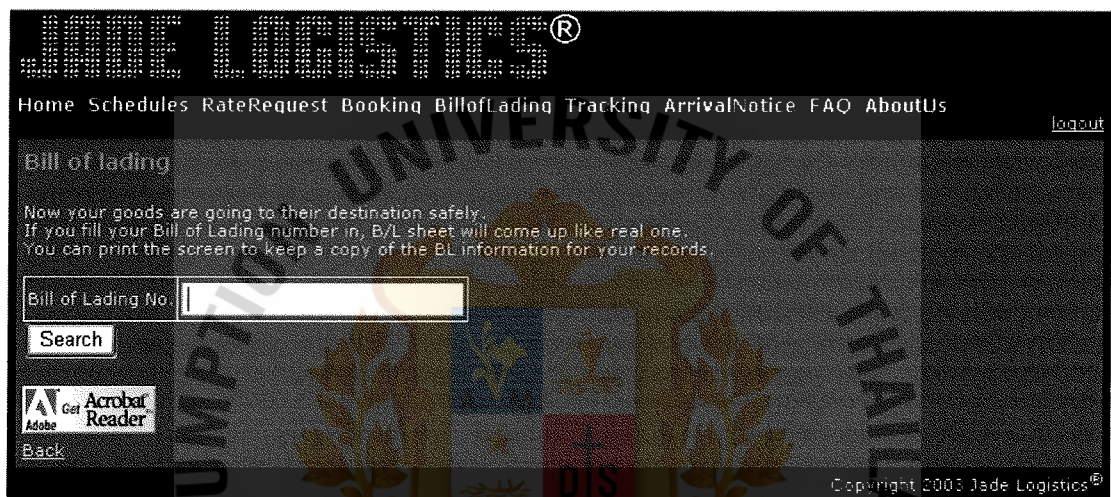


Figure B-11 Bill of Lading Tracking

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Bill of Lading 00000000

Origin	Destination	Book Time	Bill of Lading
LAEM CHABANG, THAILAND	SOUTHAMPTON, U.K.	2003-02-15 15:03:47	<a href="#">View Bill of Lading</a>

You will need the Adobe Acrobat Reader in order to view Bill of Lading.  
If you don't have the Acrobat Reader you may download it free from Adobe.



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Figure B-12 Bill of Lading Details

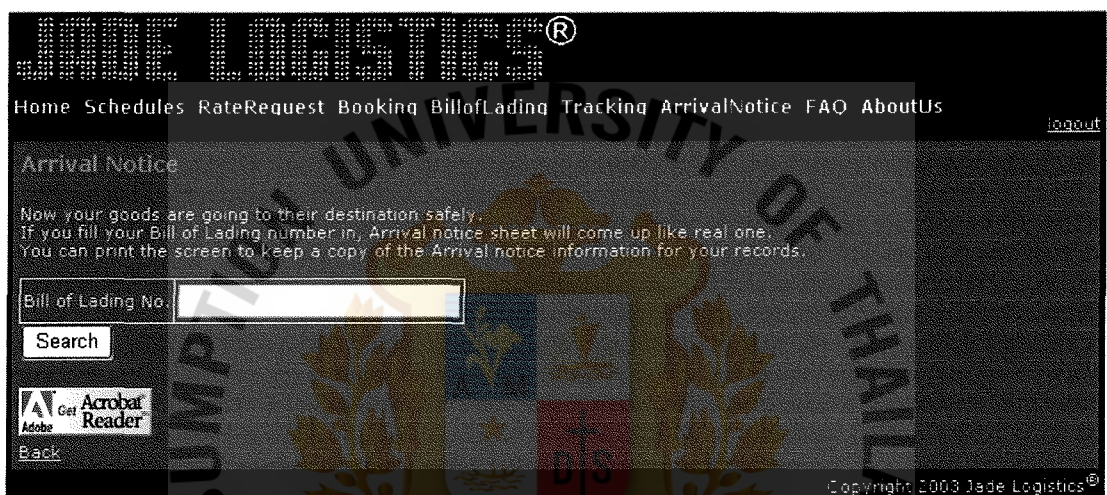


Figure B-13 Arrival Notice Tracking



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Home Schedules RateRequest Booking Bill of Lading Tracking ArrivalNotice FAQ About Us

logout

Arrival Notice for BL no. 00000000

Origin	Destination	Book Time	Arrival Notice
LAEM CHABANG, THAILAND	SOUTHAMPTON, U.K.	2003-02-15 15:03:47	<a href="#">View Arrival Notice</a>

You will need the Adobe Acrobat Reader in order to view Bill of Lading.  
If you don't have the Acrobat Reader you may download it free from Adobe.



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Figure B-14 Arrival Notice Details



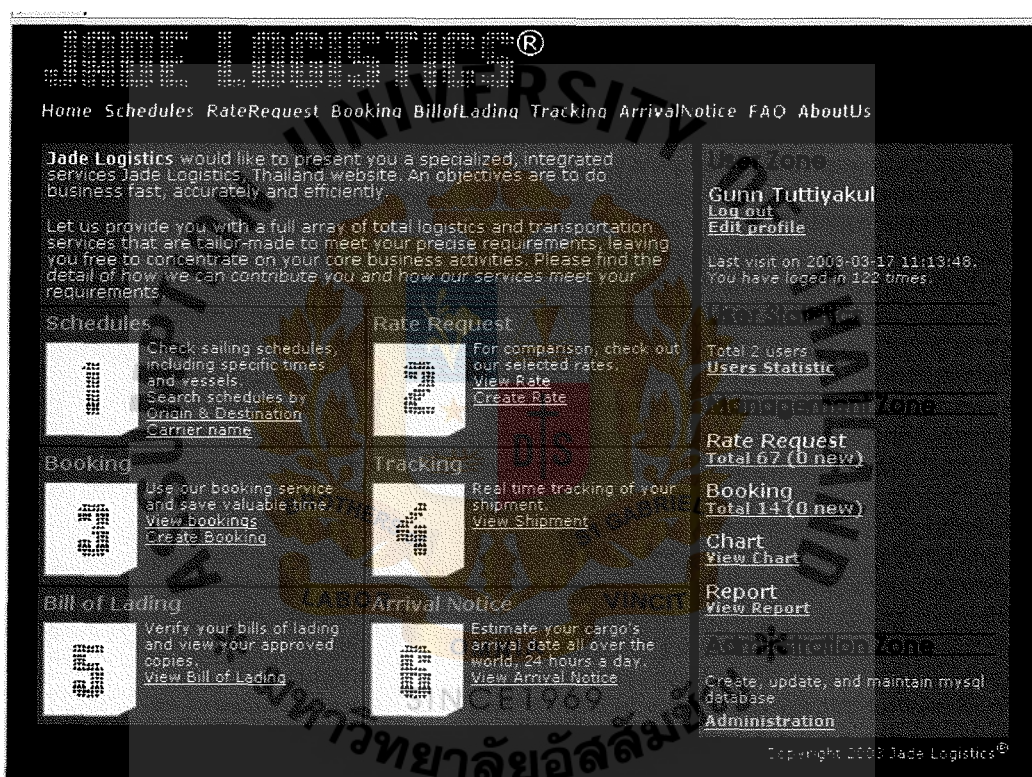


Figure B-15 Admin Home Page

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Home Schedules RateRequest Booking BillofLading Tracking ArrivalNotice FAQ AboutUs [Logout](#)

View Rate Request History

No.	ID	Username	Origin	Destination	Start	Until	Request time	More detail
1	3	lakna	LAEM CHABANG, THAILAND	SOUTHAMPTON, U.K.	2003-01-19	2003-01-19	2003-02-16 00:57:48	<a href="#">Click</a>
2	2	lakna	LAEM CHABANG, THAILAND	SOUTHAMPTON, U.K.	2003-01-19	2003-01-19	2003-02-16 00:53:04	<a href="#">Click</a>
3	1	lakna	LAEM CHABANG, THAILAND	SOUTHAMPTON, U.K.	2003-01-19	2003-01-19	2003-02-16 00:49:04	<a href="#">Click</a>

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Figure B-16 Rate Request History

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View Rate Request ID 3  

Field	Detail
ID	3
Username	lakna
Origin	LAEM CHABANG, THAILAND
Destination	SOUTHAMPTON, U.K.
From	2003-01-19
To	2003-01-19
Type	DRY
Container size 20	0
Container size 40	0
Container size 50	0
Remark	
Time	2003-02-16 00:57:48

  
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Figure B-17 Specific Rate Request History

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Home Schedules RateRequest Booking BillofLading Tracking ArrivalNotice FAQ AboutUs [logout](#)

Sealing schedules

Origin	Location	Any Ports in THAILAND
Destination	Location	BAHRAIN, BAHRAIN
Expected Ship-date	From : JAN 1 2003	To : JAN 1 2003

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Figure B-18 Searching Sailing Schedule



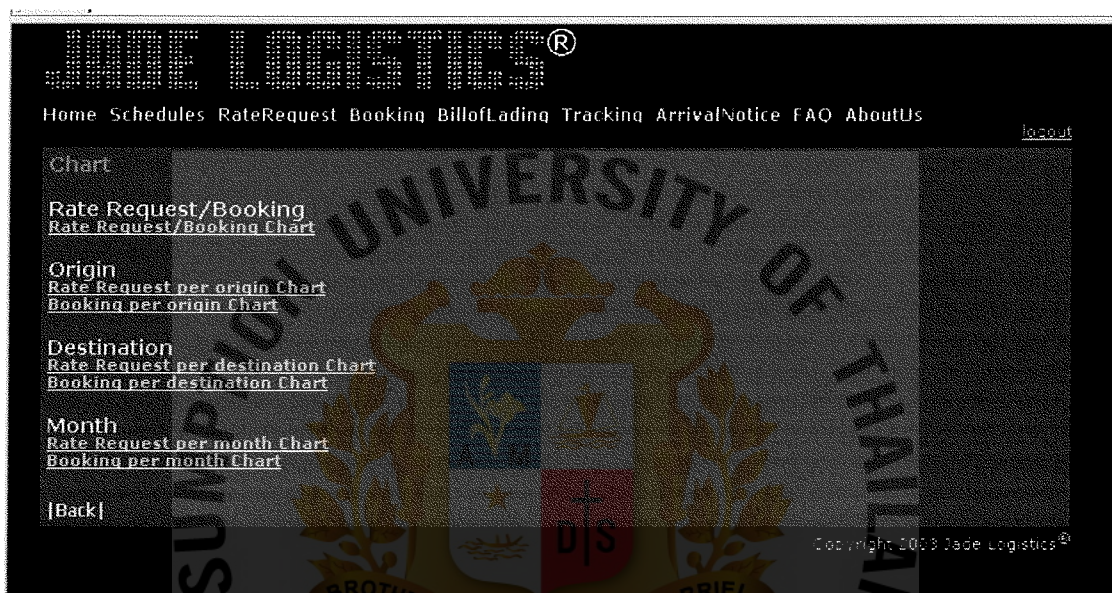


Figure B-19 Selecting Chart Page

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Home Schedules RateRequest Booking BillofLading Tracking ArrivalNotice FAQ AboutUs
logout

View Booking History

User	Username		All
Origin	Location		All
Destination	Location		All
Expected Ship-date	From	JAN 1 2003	To JAN 1 2003
Request Date	From	JAN 1 2003	To JAN 1 2003

Search

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Figure B-20 Viewing Booking History Page



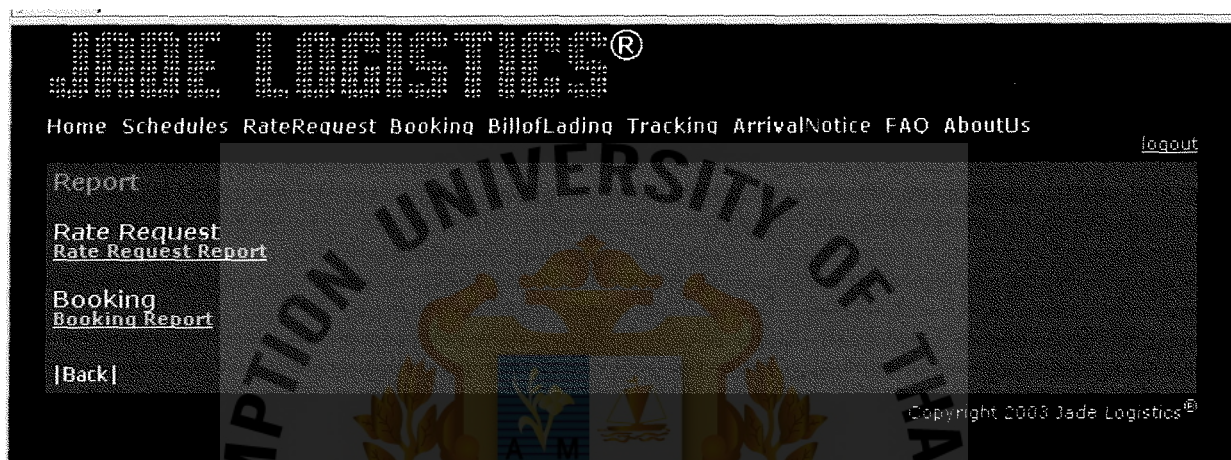


Figure B-21 Selecting Report Page

JADE LOGISTICS®

Home Schedules RateRequest Booking BillofLading Tracking ArrivalNotice FAQ AboutUs

logout

View User ID 24's Profile

Field	Detail
User ID	24
Username	orawan
Firstname	Orawan
Lastname	Vongsutavee
Email	u4121472@au.ac.th
Company	OV Co., Ltd
Address	15 Mahachai Mahachai
City	Bangkok
Country	Thailand
Zipcode	15450
Phone	6627447285
Fax	6627447286
Registration date	2003-02-10 00:04:25
Last login	2003-02-25 01:04:51
Rate request count	26
Booking count	2

Print

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Figure B-22 Viewing Profile

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Logout

Users Statistic

No.	Username	Fisrt name	Last name	Login count	Rate Request	Book	Last Login	More Detail	E-mail
1	lakna	Lakna	Tepprasit	41	41	12	2003-03-17 09:49:52	<a href="#">Click</a>	<a href="#">Send mail</a>
2	orawan	Orawan	Vongsutavee	5	26	2	2003-02-25 01:04:51	<a href="#">Click</a>	<a href="#">Send mail</a>

[Back](#)

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Figure B-23 Users Status Page

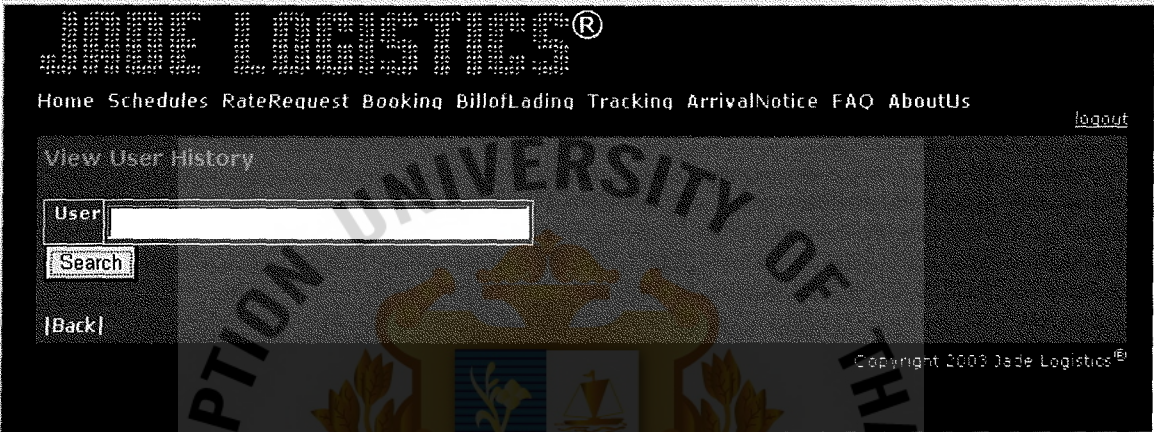


Figure B-24 Searching User History

[Home](#)
[Schedules](#)
[RateRequest](#)
[Booking](#)
[BillofLading](#)
[Tracking](#)
[ArrivalNotice](#)
[FAQ](#)
[AboutUs](#)

[Logout](#)

View Booking History


No.	ID	Username	Origin	Destination	Start	Until	Book time	More detail
1	0000008	orawan	LAEM CHABANG, THAILAND	SOUTHAMPTON, U.K.	2003-01-01	2003-01-01	2003-02-24 02:08:39	<a href="#">Click</a>
2	0000007	orawan	LAEM CHABANG, THAILAND	SOUTHAMPTON, U.K.	2003-01-01	2003-01-01	2003-02-24 02:07:17	<a href="#">Click</a>
3	0000006	lakna	LAEM CHABANG, THAILAND	SOUTHAMPTON, U.K.	2003-01-01	2003-01-01	2003-02-16 00:57:53	<a href="#">Click</a>
4	0000005	lakna	LAEM CHABANG, THAILAND	SOUTHAMPTON, U.K.	2003-01-01	2003-01-01	2003-02-16 00:55:25	<a href="#">Click</a>
5	0000004	lakna	LAEM CHABANG, THAILAND	SOUTHAMPTON, U.K.	2003-01-01	2003-01-01	2003-02-15 15:19:41	<a href="#">Click</a>
6	0000003	lakna	LAEM CHABANG, THAILAND	SOUTHAMPTON, U.K.	2003-01-01	2003-01-01	2003-02-15 15:18:55	<a href="#">Click</a>
7	0000002	lakna	LAEM CHABANG, THAILAND	SOUTHAMPTON, U.K.	2003-01-01	2003-01-01	2003-02-15 15:17:59	<a href="#">Click</a>
8	0000001	lakna	LAEM CHABANG, THAILAND	SOUTHAMPTON, U.K.	2003-01-01	2003-01-08	2003-02-15 15:03:47	<a href="#">Click</a>

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Figure B-25 Viewing Booking History Page





[Home](#)
[Schedules](#)
[RateRequest](#)
[Booking](#)
[BillofLading](#)
[Tracking](#)
[ArrivalNotice](#)
[FAQ](#)
[AboutUs](#)
[Logout](#)

### View Rate Request History

User	Username	All	
Origin	Location	All	
Destination	Location	All	
Expected Ship-date	From :	JAN 1 2003	To : JAN 1 2003
Request Date	From :	JAN 1 2003	To : JAN 1 2003
<input type="button" value="Search"/>			
<a href="#">[Back]</a>			

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Figure B-26 Viewing Rate Request History



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Home Schedules RateRequest Booking BillofLading Tracking ArrivalNotice FAQ AboutUs [Logout](#)

Booking : Select Route

Origin	Location	BANGKOK, (PAT) THAILAND
Destination	Location	BAHRAIN, BAHRAIN

Select

[Back]

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Figure B-27 Selecting Route for Creating Booking Particular

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Rate Request : Select Route

Origin	Location	BANGKOK, (PAT) THAILAND
Destination	Location	BAHRAIN, BAHRAIN

Select

[Back]

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Figure B-28 Selecting Route for Creating Rate Request

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logout

Edit profile

Username	lakna
Password	<a href="#">Change password</a>
E-mail	<a href="#">Change e-mail</a>
Firstname	Lakna
Lastname	Teprasant
Company	Jade Logistics
Address	15 Missteen Rd.
City	Bangkok
Country	Thailand
Zipcode	27888
Phone	6629464678
Fax	6629464679

Edit

[Back]

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Figure B-29 Editing Profile Page



## FAQ

### 1. What is a freight forwarder?

The freight forwarder is a service provider in the middle of industry value chain that facilitates the transport of shipments by land, air, and ocean. The services include documentation preparation, space and equipment reservation, warehousing, consolidation, insurance services, and agency services. With respect to Jade Logistics Transport Corporation Ltd., we are Integrated Freight Forwarder who is specialized in Seafreight and Airfreight services.

### 2. What is difference between a carrier and a freight forwarder?

A carrier is a service provider that owns a ship to be used to transport shipments from origin to destination. A freight forwarder is a service provider that does not own a ship but provides the same services as the carrier does.

### 3. What are your services?

Our services are comprised of four primary services: Seafreight service consisting of Full Container Load (FCL), Less than Container Load (LCL), Consolidation, Airfreight service, Project Cargo Handling, and Custom Formality.

### 4. How fast would I receive B/L after a ship is departed from a port in Thailand?

We have an express service called B/L express, which our customers would receive B/L before noon on the next day of the ship departure. By this service, our customers can make transaction with Bank faster.

### 5. Where are your services covered?

Our services are covered in all continents and trade lanes, consisting of Europe, Scandinavian, North America, Central & South America, Commonwealth of Independent States, Asia, Africa, and Oceania. View our services at the service webpage.

### 6. Do you have oversea agents?

Yes, I do. Jade Logistics Transport has more than 250 oversea agents throughout the world. When our customers' shipments reach destination, our agents are in charge of distributing and delivering the shipments to consignees.

### 7. What is your guarantee to customers after they hand over their goods to Jade Logistics in delivering shipments to destination?

All of our HB/Ls are guaranteed by the prominently worldwide insurance companies consisting of Royal & SunAlliances and Chubb. The customers can be comfortable if loss or damage is incurred. Once the customers do not rely on our HB/L, we can provide MB/L issued by carriers to them.

### 8. How could I inquire freight rate?

#### 8. How could I inquire freight rate?

It is very simple that you simply fill your details in the inquiry form and click at the submit button on the screen, your inquiry would be sent to Jade Logistics. Our representative will then contact you shortly after receiving your inquiry. In addition, you may prefer to contact our sales representative directly by calling in Jade Logistics at 66-0-2689-1122 (Auto 50 Lines).

### 9. Why do I have to use freight forwarder's services instead of carrier's? In the case, I have high volume of export shipments.

The reason is that some carriers do not transport shipments to every port. In addition, transport of shipments by a carrier has limitation. For example, if you would like to transport your shipments in high volume to several ports, you may have to contact with several carriers since the carriers may not transport shipments to some port. The transport of shipments in high volume would get cheaper rate if you ship to a port. In the case of several ports, you would not get cheaper rate because the carrier may not have services in some port. We can be your solution in getting a cheaper rate to you because we can order routing from origin to destination with several carriers. The freight forwarder gathers high volume of shipments for various customers to negotiate with carriers to get cheaper rate.

### 10. Why do I have to select Jade Logistics Transport Corporation?

It is because we provide high quality services for our customers. We are confident that our services would meet customer needs and satisfy our customers from both our core and value-added services as the following:

- We offer attractive rate to our customers.
- We order routing with the best ship and cheaper rate to you.
- We have more than 250 oversea agents throughout the world.
- We always track shipment status for all the way from origin to destination.
- We provide delivery service of B/L for our customers at their office.
- Jade Logistics's B/L are insured, called Liability Insurance.

### 11. I do not use B/L forwarder since I experienced there were higher fee at destination and think such B/L is unreliable. Should I rely on B/L forwarder?

You can trust Jade Logistics's B/L since Jade Logistics has signed contract agreement with agents so if a problem is incurred, we will talk with our agents. We do not co-load with other forwarders. We notify our agents to keep as less fees as carriers do. In addition, Jade Logistics B/L can be sold to Bank and used to release shipments at destination. Jade Logistics's B/L is insured, which is called Liability Insurance. By this service, you can rely on Jade Logistics's B/L.

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Figure B-30 Frequency Asking Questions Page

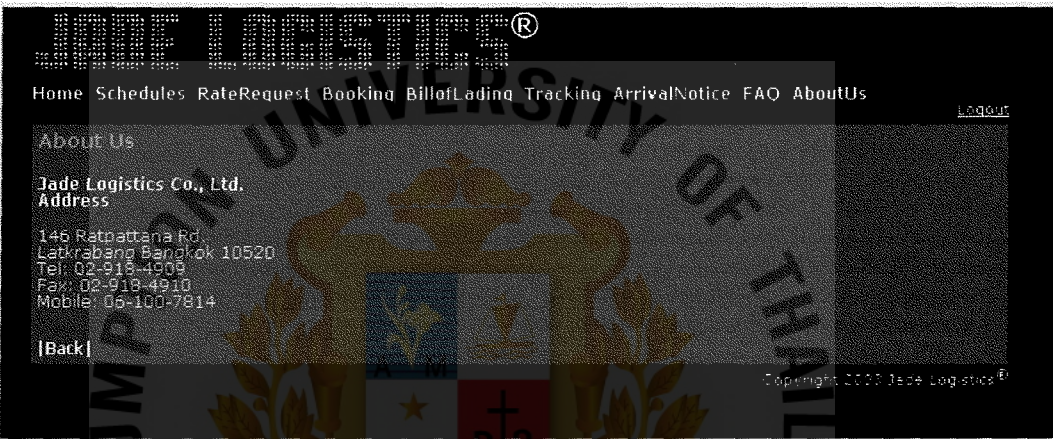


Figure B-31 About Us Page



APPENDIX C  
REPORT DESIGN



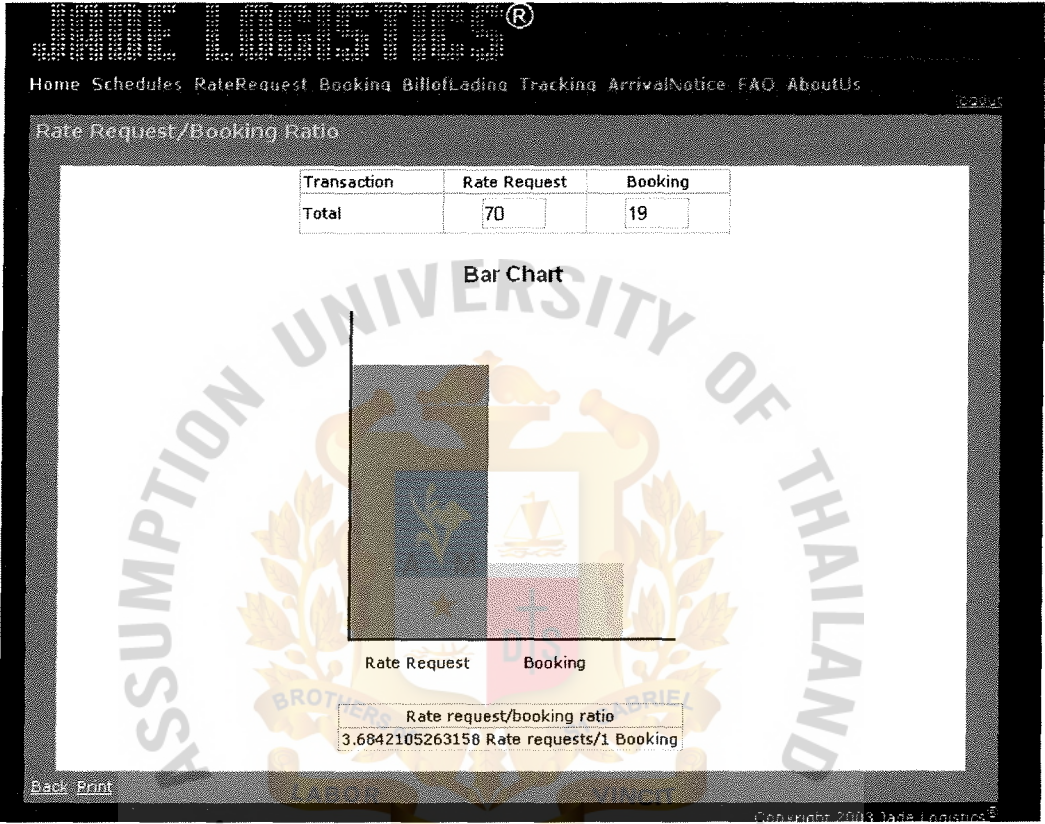


Figure C-1 Rate Request/Booking Ratio

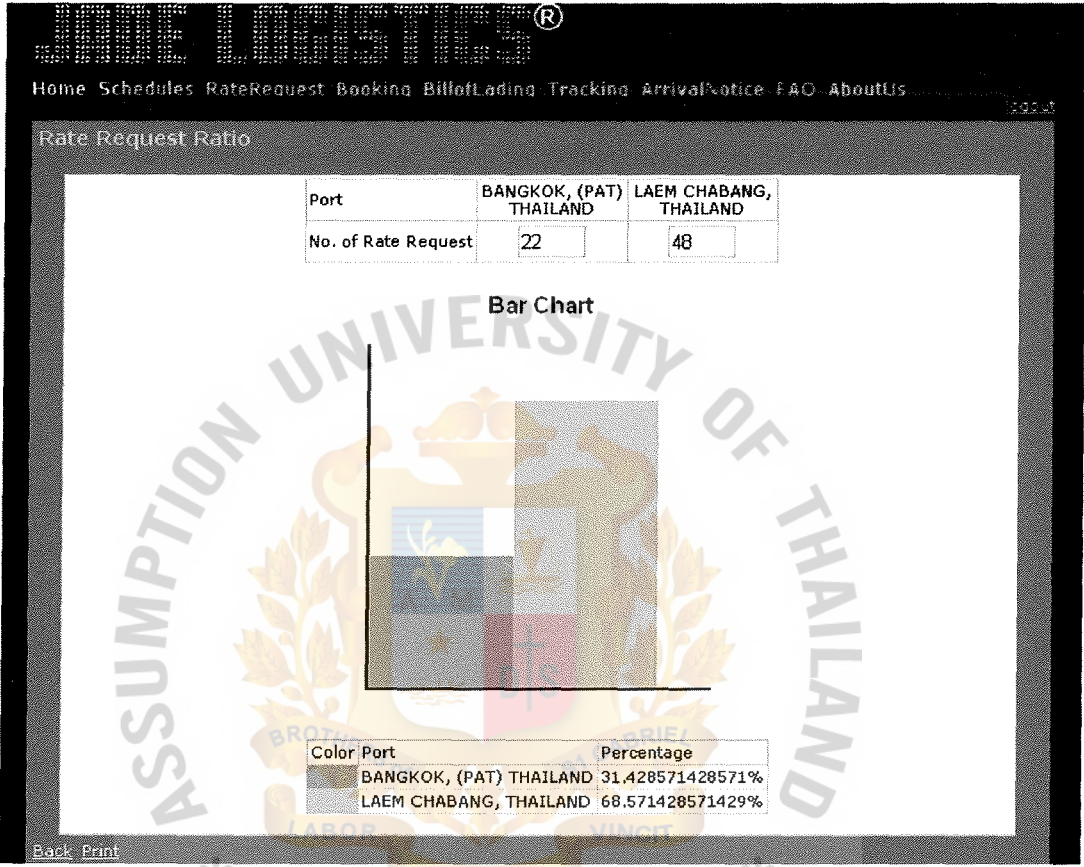


Figure C-2 Rate Request/Origin Ratio

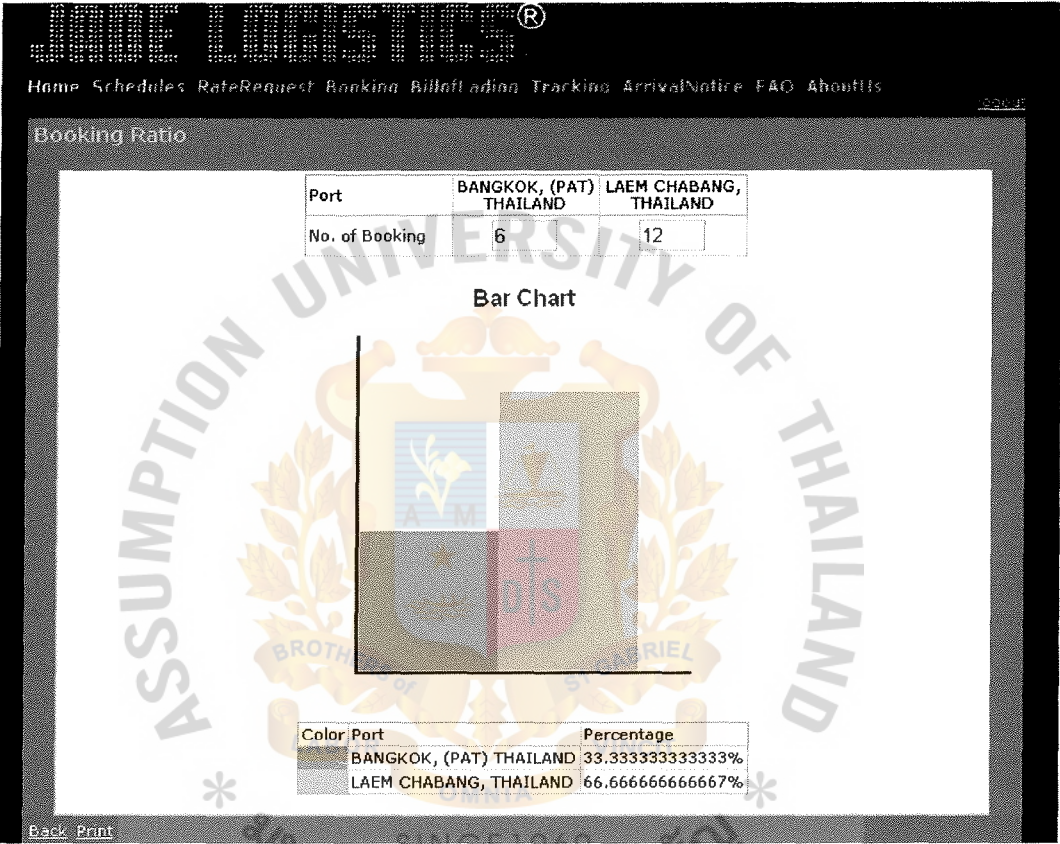


Figure C-3 Booking/Origin Ratio

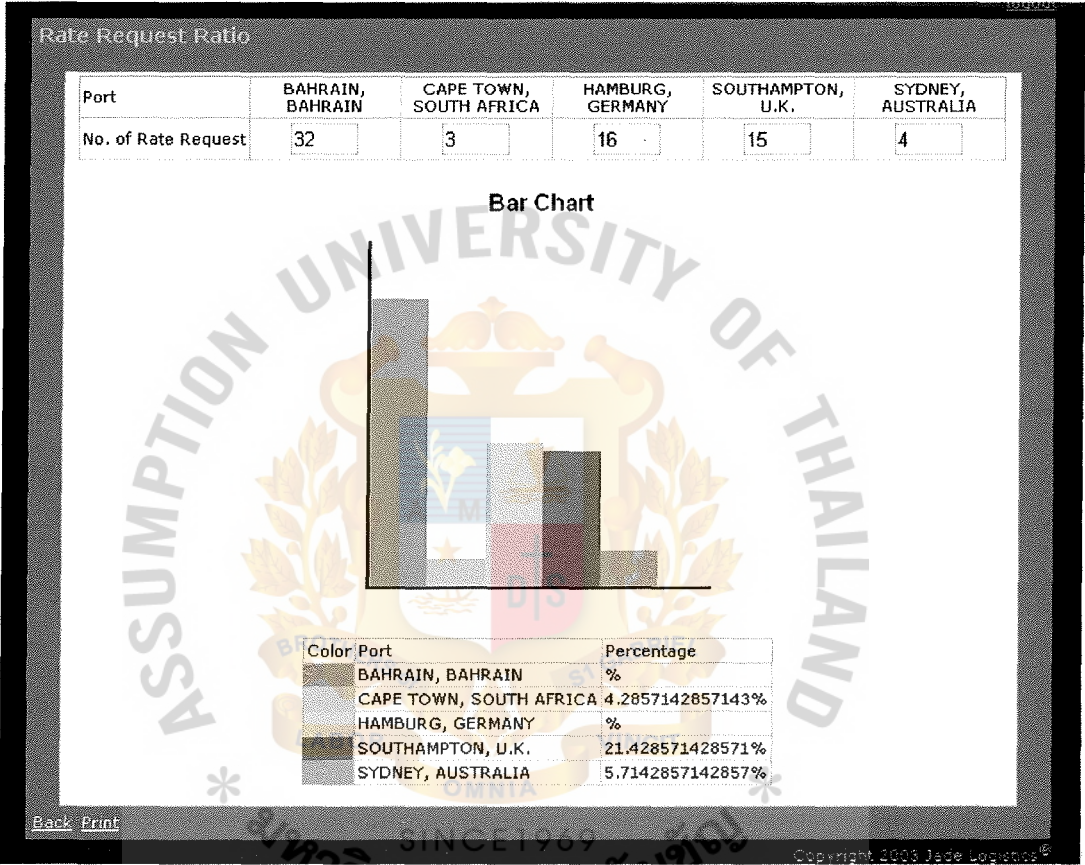


Figure C-4 Rate Request/Destination Ratio



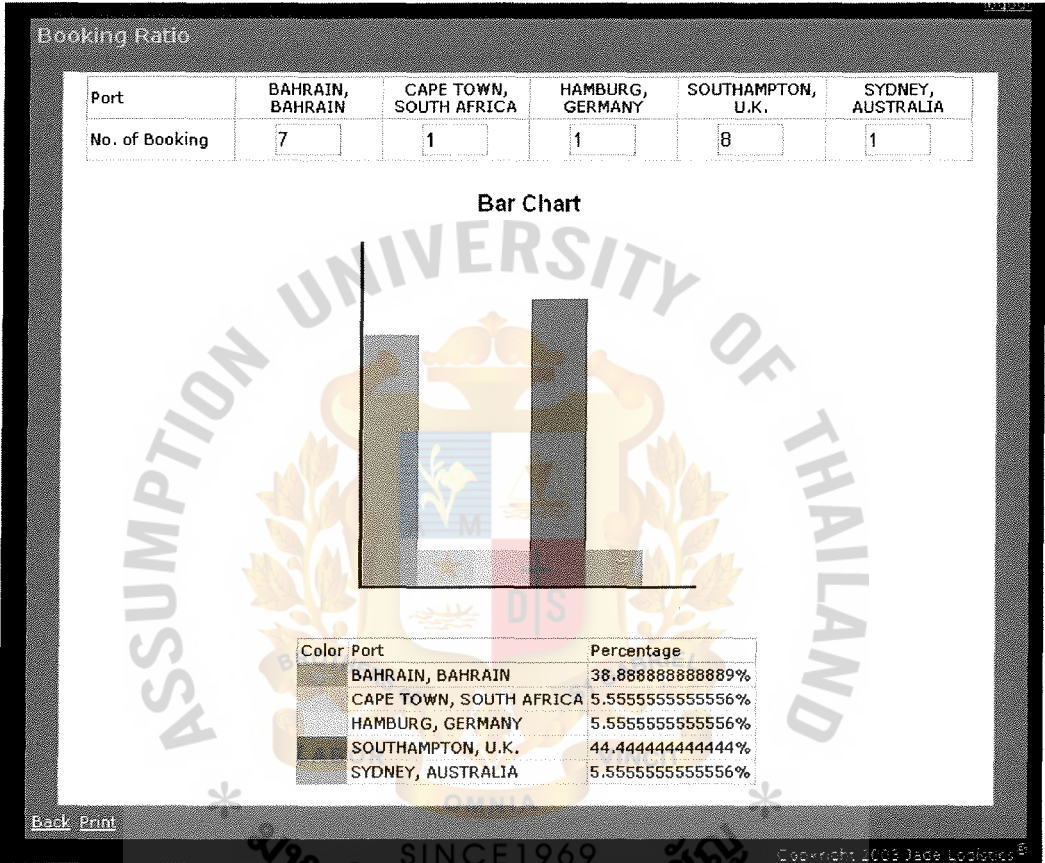


Figure C-5 Booking/Destination Ratio

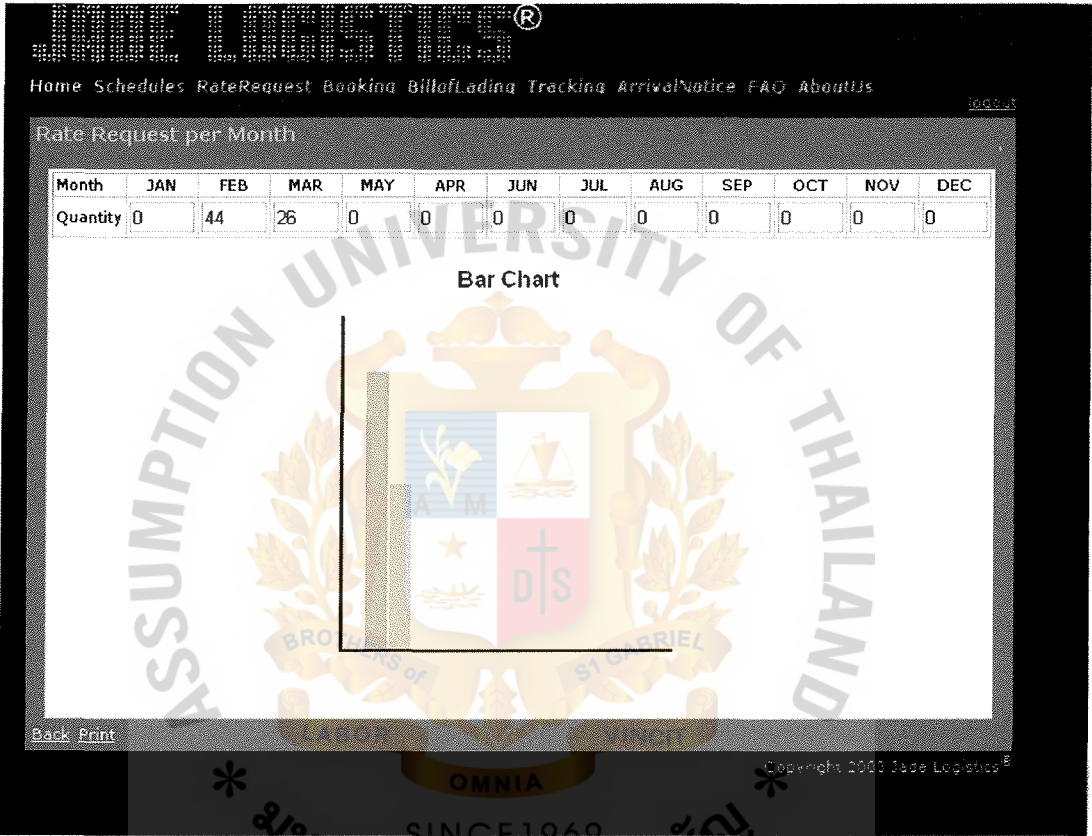


Figure C-6 Rate Request/Month Ratio



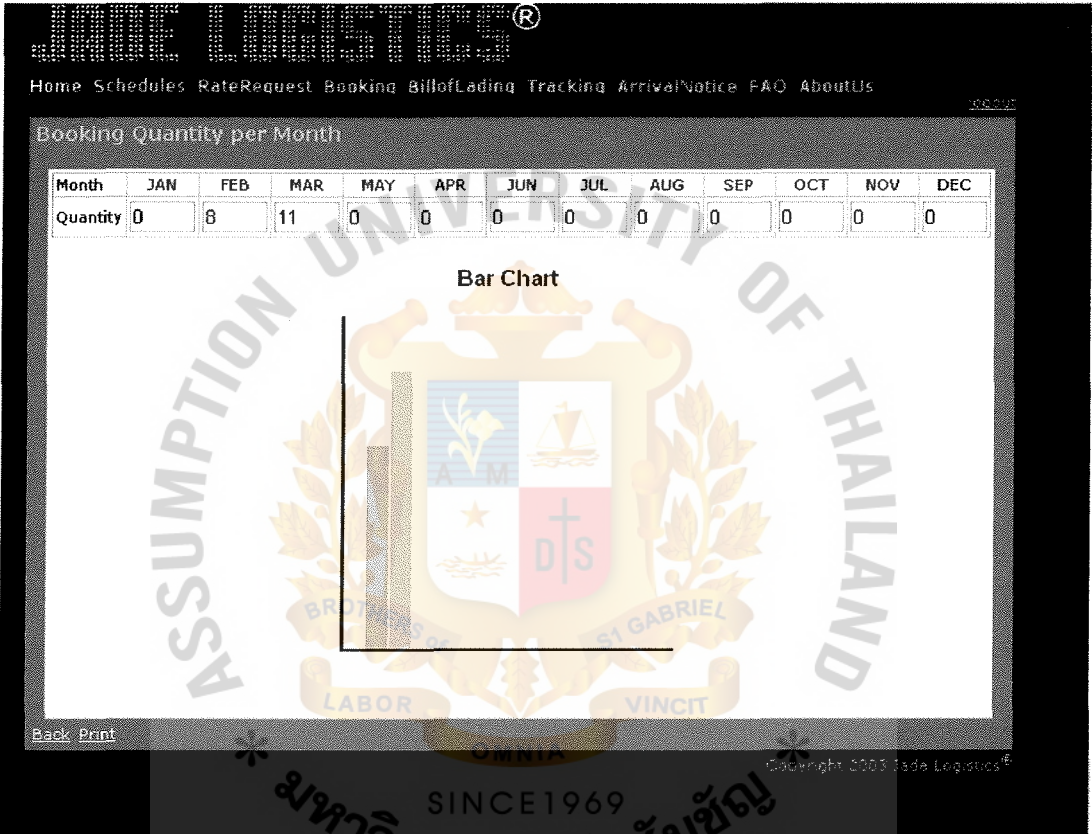


Figure C-7 Booking/Month Ratio

BILL OF LADING

Shipper / Exporter ( complete name and address )		Document No.		B/L No. HDMU HBK900745900	
		Export References			
Consignee ( complete name and address )		Forwarding Agent References			
		Point and Country of Origin			
Notify Party ( complete name and address )		Domestic Routing/Export Instructions			
Pre-Carriage by		Place of Receipt *			
Ocean Vessel/Voyage/Flag V		Port of Loading		Onward Inland Routing	
Port of Discharge		For Transshipment to		Place of Delivery *	
				Final Destination (For the Merchants Ref.)	
PARTICULARS FURNISHED BY SHIPPER					
Container No./Seal No. Marks and Numbers		No. of Containers or Other Pkgs.		Description of Packages and Goods	
				SHIPPER'S LOAD & COUNT :	
				Gross Weight	
				Measurement	
Total Number of Containers or Packages ( in words )					
Freight & Charges		Rate		Unit	
FREIGHT AS ARRANGED				Prepaid	
				Collect	
Declared Value ( Optional ) : US \$		Total Charges			
( PACKAGE LIMITATION CLAUSE ) <small>Section 4. (9) of U. S. Carriage of Goods by Sea Act-1924: Neither the carrier nor the ship shall in any event be or become liable for any loss or damage to or in connection with the transportation of goods in an amount exceeding \$500 per package lawful money of the United States, or in case of goods not shipped in packages, per customary freight unit or the equivalent of that sum in other currency, unless the nature and value of such goods have been declared by the shipper before shipment and inserted in the Bill of Lading and additional freight has been paid as required. This declaration, if embodied in the Bill of Lading, shall be prima facie evidence, but shall not be conclusive on the carrier. THIS CLAUSE SHALL APPLY ONLY TO GOODS MOVING TO OR FROM PORTS OF UNITED STATES. IN ACCEPTING THIS BILL OF LADING, the shipper, owner and consignee of the goods and the holder of the Bill of Lading expressly accept and agree to all its stipulations, exceptions and conditions, whether written, stamped or printed, as fully as if signed by each shipper, owner, consignee and/or holder. No agent is authorized to waive any of the provisions of the clauses IN WITNESS WHEREOF, the master of said ship has affixed his Bill of Lading, all of this tenor and date. ONE of which being accomplished, the others to stand void. Applicable only when this document is used as an intermodal transport Bill of Lading</small>		Number of Original B(s)/L		On Board Date	
		Dated at		By	
				Hyundai America Shipping Agency, Inc. as agent for Hyundai Merchant Marine Co., Ltd., Carrier	

Figure C-8 Bill of Lading

# HYUNDAI

## ARRIVAL NOTICE

MERCHANT MARINE CO., LTD.

B/L Number : HDMU		ETA : / /	
Vsl/Voy : BAE V		BKG Number :	
Shipper/Exporter DOMSTEIN FISH A/S P.O.BOX 14. N-6701 MAALOEY, NORWAY		Consignee PACIFIC SUNRISE INTERNATIONAL CORP. 7609 S.E. 29TH STREET MERCER ISLAND WA 98040	
Notify Party 34245- ASIA SHIPPING & TRANSPORTATION GMBH WENDENSTR. 23 20097 HAMBURG		Forwarding Agent References	
Place of Receipt	Port of Loading	Port of Discharge	Place of Delivery
, 000			, CY
PARTICULARS FURNISHED BY SHIPPER			
Marks & Numbers	Other Pkgs	Description of Packages and Goods	G.Weight
			Measurement
CY / CY "SHIPPER'S LOAD & COUNT, SAID TO BE 305 CTNS DETAILS AS PER ITEMIZED  TOTAL: ONE ( 1 X 20' ) CONTAINER ONLY  002 E/423 SHIPPER'S LOAD AND COUNT "FREIGHT COLLECT"  PACK CODEPCL/FCL TY:12 PCS 101900 1 BULK LEXAN POLYCARBONATE 105-111 13440 KGS GE INV. 101100047 97 GE ORD. 10365620 277817 1 BULK LEXAN POLYCARBONATE 105-111 14300 KGS GE INV. 101100047 98			15.062 KGS
No. of Cntr/pkgs			
Freight & Charges	Rate	Unit	Prepaid
			Collect
Dated at		Total Charges	

Figure C-9 Arrival Notice

# HYUNDAI

MERCHANT MARINE CO., LTD.

## ARRIVAL NOTICE

B/L Number : HDMU		ETA :											
Vsl/Voy :		BKG Number :											
Shipper/Exporter		Consignee											
Notify Party		Forwarding Agent References											
Place of Receipt	Port of Loading	Port of Discharge	Place of Delivery										
<p align="center"><b>PARTICULARS FURNISHED BY SHIPPER</b></p> <table border="1"> <thead> <tr> <th>Marks &amp; Numbers</th> <th>Other Pkgs</th> <th>Description of Packages and Goods</th> <th>G.Weight</th> <th>Measurement</th> </tr> </thead> <tbody> <tr> <td>           915653            GE ORD.            1 BULK            11860 KOS            GE INV. 101100047 99            GE ORD.            NJUNG            CANS            OF GOODS: LAMINATING            WAYBILL            RELEASE PROCEDURE            N GERMANY            OF GOODS: STANDARD            FREIGHT PREPAID            /LC/U            B-NO.            94 DATED            2000            883/1-24            /72            TING            VE            IVBS/         </td> <td>10365620</td> <td>           LEXAN POLYCARBONATE 105-111            101100047 99            10365620            VOLUME OF GOODS:            480 CANS X            25KGS/CAN EQUALS            12,000 KGS, H. S. NO:            3506.91.900            COUNTRY OF ORIGIN:            GERMANY, L/C            APPLICATION NO.:            058.030/7615", E1969         </td> <td></td> <td></td> </tr> </tbody> </table>				Marks & Numbers	Other Pkgs	Description of Packages and Goods	G.Weight	Measurement	915653 GE ORD. 1 BULK 11860 KOS GE INV. 101100047 99 GE ORD. NJUNG CANS OF GOODS: LAMINATING WAYBILL RELEASE PROCEDURE N GERMANY OF GOODS: STANDARD FREIGHT PREPAID /LC/U B-NO. 94 DATED 2000 883/1-24 /72 TING VE IVBS/	10365620	LEXAN POLYCARBONATE 105-111 101100047 99 10365620 VOLUME OF GOODS: 480 CANS X 25KGS/CAN EQUALS 12,000 KGS, H. S. NO: 3506.91.900 COUNTRY OF ORIGIN: GERMANY, L/C APPLICATION NO.: 058.030/7615", E1969		
Marks & Numbers	Other Pkgs	Description of Packages and Goods	G.Weight	Measurement									
915653 GE ORD. 1 BULK 11860 KOS GE INV. 101100047 99 GE ORD. NJUNG CANS OF GOODS: LAMINATING WAYBILL RELEASE PROCEDURE N GERMANY OF GOODS: STANDARD FREIGHT PREPAID /LC/U B-NO. 94 DATED 2000 883/1-24 /72 TING VE IVBS/	10365620	LEXAN POLYCARBONATE 105-111 101100047 99 10365620 VOLUME OF GOODS: 480 CANS X 25KGS/CAN EQUALS 12,000 KGS, H. S. NO: 3506.91.900 COUNTRY OF ORIGIN: GERMANY, L/C APPLICATION NO.: 058.030/7615", E1969											
No. of Cntr/pkgs													
Freight & Charges	Rate	Unit	Prepaid										
			Collect										
Dated at		Total Charges											



**HYUNDAI**  
MERCHANT MARINE CO., LTD.

## ARRIVAL NOTICE

B/L Number : HDMU		ETA :		
Vsl/Voy :		BKG Number :		
Shipper/Exporter		Consignee		
Notify Party		Forwarding Agent References		
Place of Receipt	Port of Loading	Port of Discharge	Place of Delivery	
PARTICULARS FURNISHED BY SHIPPER				
Marks & Numbers.	Other Pkgs	Description of Packages and Goods	G.Weight	Measurement
1133)		"LETTER OF CREDIT NO. 887615/LC/U DTD. 1999.11.17 OF UNITED OVERSEAS BANK BALI, GEDUNG PELNI LT II, JL. GAJAH MADA NO. 14, JAKARTA/INDONESIA"		
1 CONTAINER =====		14.388,000 KG =====		
No. of Cntr/pkgs				
Freight & Charges	Rate	Unit	Prepaid	Collect
Dated at		Total Charges		



